September 17, 1956

To Win Passengers — Advertise . . . p. 28

RAILWAY AGE

WORKBOOK OF THE RAILWAYS

THE INDUSTRY'S ONLY WEEKLY NEWSMAGAZINE



On this B&O Bridge—
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permit shallow floor depth design

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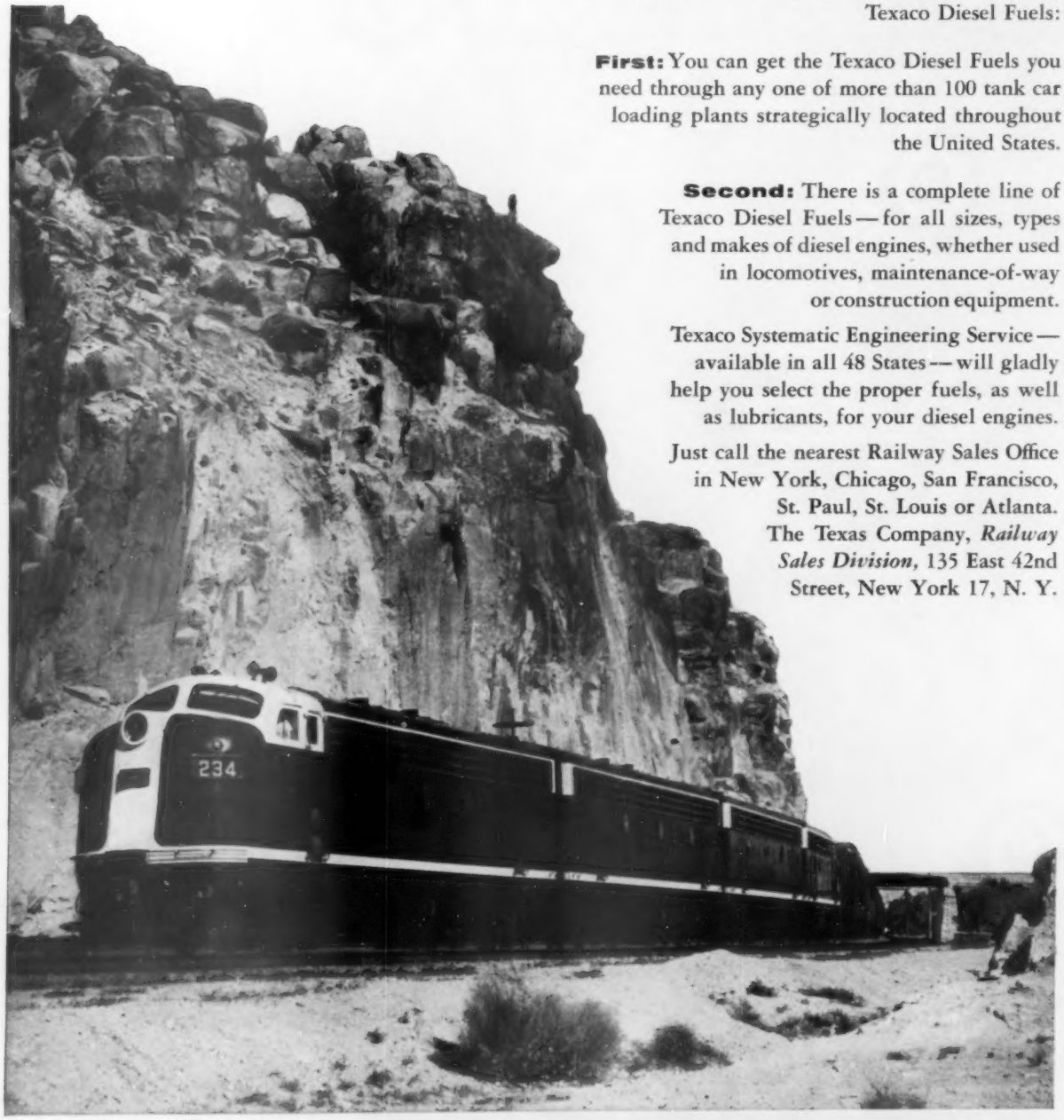
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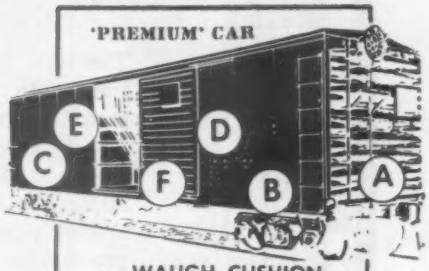
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Workbook of the Railways

Vol. 141, No. 11
September 17, 1956

CONTENTS and

Week at a Glance

To minimize a growing car shortage . . .

. . . railroads are taking vigorous action aimed at making best possible use of the available car fleet. Record orders and car repair programs supplementing these efforts seem sure to keep shortages below last year's levels. . . . p.7

Pleas for higher passenger fares . . .

. . . have been supported in statements filed with the ICC by the New York Central and Pennsylvania. The former says it wants to stay in the passenger business only where it is economically possible. . . . p.8

FORUM: Systematic, long-range rate strategy . . .

. . . should replace the "across the board" rate increase device for protecting railroad revenue. Whether or not railroads are privately owned ten years from now may depend upon the intelligence and speed with which they introduce modern and realistic methods into the pricing of their transportation services. . . . p.21

The twelve rectifier-type locomotives . . .

. . . ordered last year by the Virginian for delivery beginning next month will operate two in multiple most of the time. After receipt of the 12 units, built by General Electric, the railroad plans to retire 36 thirty-year-old electric locomotive units. . . . p.22

$2 million are being spent . . .

. . . by the Pennsylvania to modernize ticket selling facilities in Pennsylvania Station, New York. One hundred television cameras and 96 receivers will enable ticket sellers to see Pullman and reserved seat coach space available to and from any of 76 designations. . . . p.24

What may be the longest stretch . . .

. . . of railroad ever built in Latin America at one time is scheduled for completion in 1958. The 468-mile 3-ft-gage line, to connect Colombia's industrial area with ports on the Caribbean, will cost an estimated $80 million. . . . p.26



. . . guards perishables under ALL conditions!

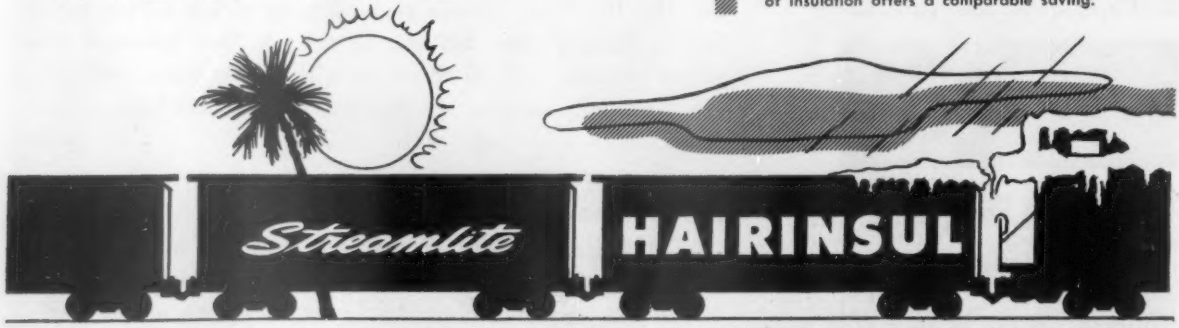
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Current Statistics

Operating revenues, seven months	
1956	$6,046,938,511
1955	5,684,950,384
Operating expenses, seven months	
1956	$4,694,896,497
1955	4,298,655,712
Taxes seven months	
1956	$629,099,537
1955	613,575,909
Net railway operating income, seven months	
1956	$572,038,261
1955	623,003,094
Net income, estimated, seven months	
1956	$443,000,000
1955	488,000,000
Average price 20 railroad stocks	
September 11, 1956	96.39
September 13, 1955	97.59
Carloadings revenue freight	
Thirty-five weeks, 1956	25,023,921
Thirty-five weeks, 1955	24,778,891
Average daily freight car surplus	
Wk. ended Sept. 8, 1956	3,907
Wk. ended Sept. 10, 1955	5,056
Average daily freight car shortage	
Wk. ended Sept. 8, 1956	8,708
Wk. ended Sept. 10, 1955	9,744
Freight cars on order	
August 1, 1956	126,194
August 1, 1955	42,888
Freight cars delivered	
Seven months, 1956	38,533
Seven months, 1955	19,303
Average number railroad employees	
Mid-July 1956	1,032,859
Mid-July 1955	1,091,380

RAILWAY AGE IS A MEMBER OF ASSOCIATED BUSINESS PUBLICATIONS (A.B.P.) AND AUDIT BUREAU OF CIRCULATION (A. B. C.) AND IS INDEXED BY THE INDUSTRIAL ARTS INDEX, THE ENGINEERING INDEX SERVICE AND THE PUBLIC AFFAIRS INFORMATION SERVICE. RAILWAY AGE, ESTABLISHED IN 1856, INCORPORATES THE RAILWAY REVIEW, THE RAILROAD GAZETTE, AND THE RAILWAY AGE GAZETTE. NAME REGISTERED IN U. S. PATENT OFFICE AND TRADE MARK OFFICE IN CANADA.

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Week at a Glance CONTINUED

Advertising wins passengers . . .

. . . and the Reading, after a vigorous program of custom-tailored local advertising, reports an increase of more than 50% in its off-peak suburban patronage. . . . p.28

BRIEFS

Improved statistical coverage of transport . . .

. . . is the objective of a program for a census of transportation which has been submitted to Secretary of Commerce Weeks. The program, endorsed by the under secretary of commerce for transportation, Louis S. Rothschild, was prepared by his staff under general supervision of his assistant, Paul F. Royster, with technical assistance from Donald E. Church, chief, Transportation Division, Bureau of the Census.

The ICC's Ogden Gateway decision . . .

. . . will finally become effective on November 30. The commission has so determined in an order following through on the Supreme Court victory it won in the case last June. The decision, made in 1953, was litigated for three years. It gives the Denver & Rio Grande Western a partial victory over the Union Pacific by requiring the latter to participate in some joint rates over through routes via Ogden, Utah.

Box cars can't carry "piggyback" traffic . . .

. . . at least until the ICC looks into the matter. The commission has suspended for investigation tariffs which propose to publish rules permitting the interested railroads, at their option, to substitute box car service, including pick-up and delivery, in lieu of trailer-on-flat-car service.

The 110-mile pipeline . . .

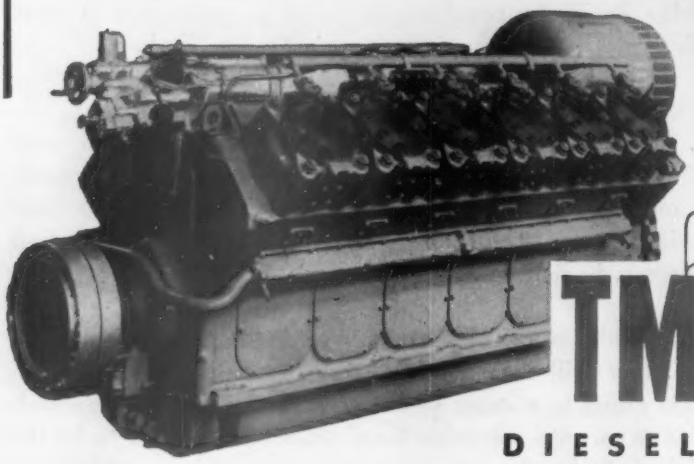
. . . that will transport processed coal from southeastern Ohio mines to a steam power plant near Cleveland is scheduled to go into operation soon. The facility—said to be the nation's first such commercial venture—will have a minimum annual capacity of about 1,200,000 tons of coal.

Nebraskans will vote . . .

. . . this fall on the ton-mile tax for highway users, barring court action. Initiative petitions, necessary to place the issue on the November ballot, have been filed. The only other time the tax has come directly before the voters was in Oregon in 1952. It was overwhelmingly approved.

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Severe Car Shortage Looms

But railroads' advance preparations, including car purchases, more effective car distribution plans and slashing of repair ratio, should ease the pinch

Railroads are faced right now with serious car shortages that promise to become more critical in the weeks ahead.

But, thanks to the railroads' record purchases of new cars, and intensified car repair and utilization programs, conditions should not reach the severity of last October.

Analysis of carloading and car supply figures from the AAR's Car Service Division, plus reports from individual railroads, makes it clear that there just won't be enough cars to go around next month.

Factors contributing to the situation include the steel strike and its after effects, seasonal harvests, production of 1957 automobiles, suspension of proposed demurrage rate hikes, resurgence of the coal industry, and even such a seemingly minor thing as greater use of mechanical car-unloading equipment.

Of these, perhaps the steel strike is most important, affecting, as it has, not only construction and repair of freight cars, but also carloadings themselves. It's estimated the strike cost railroads some 800,000 carloads of freight. The back-swing of post-strike business still hadn't brought loadings back to 1955 levels on September 1, but the gap was closing fast. And, as loadings climb, average daily car shortages also move upwards.

For the week ended September 1, daily shortages averaged 10,042—indicating that shortages of as much as 15,000 a day may be in the offing as industrial production continues and fall harvest movements reach their peak in October.

It is doubted at the AAR, however, that shortages will zoom to the levels of last fall when daily totals of cars lacking ran as high as 22,000.

The 10,042 cars short on September 1 included 3,936 hoppers (indicating in part the rise in coal traffic this year), and 3,411 box cars. Of the latter, greatest demands were reported for top grade cars and for 50-ft and wide-door cars, the latter classification reflecting use of mechanical loading devices.

While reports indicate that tight car-supply conditions exist nationwide, some roads anticipate little difficulty in meeting shippers' demands. Others reached by Railway Age acknowledge that although conditions will be tight, they expect to be able to protect all commitments.

Nevertheless, one big eastern road reports "it is a known fact that the box car situation has been tight for several months, and as far as we can see ahead, we expect that situation to prevail until the year end."

R. A. Trovillion, traffic vice-president, Illinois Central, forecasts "a severe tightening in box car supply" but emphasizes what many other roads do: that the IC is acting to counteract the situation.

Advance Preparations — "We have endeavored to plan ahead" by accumulating 85% of the road's box car ownership on line, Mr. Trovillion says, adding "we have less than 1.6% of our cars undergoing repair, which is considerably better than the national average." He states that "our transportation people have uppermost in mind the importance of providing prompt handling in movement of both loads and empties. Equitable distribution of empty equipment to our patrons is, in our opinion, a prime requisite to a good transportation job."

Similar steps are reported by A. W. Richardson, assistant vice-president, traffic, Wabash, who expects "the usual flood of soy beans" in October plus "a very large corn crop." He says the Wabash is ready to meet a "very tight box car situation" largely because it has acquired 1,033 new cars of all types since January 1955, while its car-repair facilities are busy upgrading 1,500 others for grain loading.

Another midwestern road said "extreme" shortages are "certain" through November. It plans "intense policing" of car movements and spotting, switching and repair work with a minimum of delay to "get the maximum utilization out of every box car on our railroad." It also plans wide substitution of other car types for box cars and will restrict use of box cars for company movements.

New Cars and Repairs—One railroad spokesman estimated that the steel strike cost the industry



Olympic Book for Santa Fe

General Passenger Traffic Manager R. T. Anderson (left) of Santa Fe, accepts copy of book containing report of 1952 Olympic games at Helsinki, Finland, from A. C. Facine, Illinois sales representative for Miller Brewing Company, which donated books for placement in lounge cars of Santa Fe's crack passenger trains.

8,000 new cars but despite this, 35,627 new cars were delivered to Class I roads through July, compared with 35,738 throughout all 1955.

The railroads' bad-order ratio also suffered a setback as a result of the strike. The AAR reports railroads had slashed the ratio to 3.9% by July 1 but, with steel for repairs dried up by the strike, the ratio climbed to 4.5% on August 1. The peak of the traffic movement may be passed before the ratio is trimmed to 4% again, an AAR representative said.

"We are doing everything possible to upgrade cars in our shops," W. G. Peoples, Southern Pacific vice-president, freight traffic, reported.

The SP is faced with "extremely tight" conditions, with "aggravation of shortages presently experienced for high class and large dimension or double-door box cars," he said. Although this road is speeding up car turnaround time, Mr. Peoples said "we are extremely short of gondolas and hopper cars, but as we understand it, most railroads are. This is due primarily to peak seasonal shipments which will lessen considerably" later on.

New York Central's vice-president, freight sales and service, A. E. Baylis, also stressed his road's efforts to offset a "very heavy demand for box cars." He said the road has cut its bad-order ratio to 2.6%, while 3,000 new box cars have been received this year and another 1,000 are due in the next four months. Mr. Baylis also reported "steps . . . to insure distribution of equipment on our rails so that our shippers will have maximum utilization of available cars."

One of the major western roads, noting a combination of seasonal heavier loadings, the end of the steel strike, a backlog of shipments and a bumper grain crop, foresees a "tight" box-car situation but anticipates no "serious inconvenience." To ease the pinch, this road reports spending an "appreciable sum" to upgrade its car fleet.

Some roads, like the Rio Grande, anticipate some "spot shortages," but the D&RGW expects that its upgrading and ownership programs should enable it to protect loadings generally.

The Missouri-Kansas-Texas, says J. F. Hennessey, vice-president, sales and service, expects a heavy movement of milo and soy beans but its car supply burden will be eased as a result of a drought-shrunk cotton crop in Texas and Oklahoma. This road, too, says car repairs supplementing its scheduled new car deliveries "should enable us to protect our orders."

To meet the demands of "the greatest bean harvest on record" plus heavy corn movements, the Monon has been storing box cars at elevators to build up "a backlog of empty cars sufficient for one week's grain loading. We consider such action necessary, though expensive," said C. C. Robinson, superintendent car service, "to prevent our elevators from diverting their entire grain movements to highway carriers." Further, the Monon encourages use of covered hoppers for regular bulk commodity movements to release box cars for other loadings.

Fare Pleas Supported by Eastern Roads

NYC wants to stay in passenger business wherever it is economically feasible—PRR calls deficit an "undue burden" on other traffic and on net revenues

The New York Central wants to stay in the passenger business only where it is economically feasible, and the Pennsylvania considers its present passenger deficit an undue burden on other traffic and on net revenues of the railroad as a whole.

These positions were taken in statements filed with the Interstate Commerce Commission in support of the proposed increase of 45% in parlor and sleeping car fares and of 5% in coach rates. Joining NYC and PRR in the proposal are the Chesapeake & Ohio, Norfolk & Western, Pennsylvania-Reading Seashore Lines and Pittsburgh & Lake Erie. The Lehigh Valley and Reading are also parties to the case (No. 32032), but only insofar as a 5% increase in coach fares is proposed.

The NYC presentation was made by E. C. Nickerson, vice-president, passenger sales and service. He said the proposed increase in Pullman rates should provide "substantial benefits with a continuation of a reasonable volume of business." He added: "Should the public instead elect to use subsidized air lines or other modes of transport, it would be economically sound under the private enterprise system to shrink a service for which the public is unwilling to pay the cost."

"Our basic objective," Mr. Nickerson also said, "is to produce the maximum amount of passenger service that can be performed on a sound economic basis. We do not believe that in the long run our passenger service policy should be based on this service being heavily subsidized by freight service, although such may be necessary to some degree in a transition period or during a slump . . . We intend to stay in the passenger business wherever it is economically feasible. In the case of the Pullman service specifically, we want to continue it; our objective in seeking these fares is to help us do this; without these fares we have no alternative but to substantially diminish it."

NYC, as Mr. Nickerson put it, considers the fare proposal an "essential step" in its plans for meeting the passenger-deficit problem. Other steps in the program, as now formulated, he listed as follows:

1. To build and improve in areas which afford the opportunity for sound operation, and to withdraw from areas not affording such an opportunity, consistent with the public interest.
2. To price the services so far as possible at a level which, with efficient operation, will cover the cost of doing business.
3. To aggressively merchandise the services, using modern research, marketing and merchandising techniques.
4. To operate as efficiently as possible and in a manner to provide courteous, clean, expeditious and on-time performance on trains and in stations and to promote new and repeat business which is economically sound to handle.
5. To develop and utilize new types of equipment, methods, practices and facilities.
6. To develop, train and implement organization and personnel to accomplish this program.

The PRR presentation was

(Continued on page 10)

RAILWAY MARKET OUTLOOK THIS WEEK

a RAILWAY AGE Workbook Page

Carloadings Down.—Loadings of revenue freight in the week ended September 8 totaled 679,611 cars, the Association of American Railroads announced on September 13. This was a decrease of 104,755 cars, or 13.4%, compared with the previous week; a decrease of 22,381 cars, or 3.2%, compared with the corresponding week last year; and an increase of 78,086 cars, or 13.0%, compared with t he equivalent 1954 week.

Loadings of revenue freight for the week ended September 1 totaled 784,366 cars; the summary, compiled by the Car Service Division, AAR, follows:

REVENUE FREIGHT CAR LOADINGS
For the week ended Saturday, September 1

District	1956	1955	1954
Eastern	125,681	120,524	108,194
Alleghany	155,443	150,056	123,494
Pocahontas	64,958	62,956	48,519
Southern	127,031	125,865	116,609
Northwestern	122,024	142,424	115,991
Central Western	130,309	129,488	118,623
Southwestern	58,920	58,409	57,062
Total Western Districts	311,253	330,321	291,676
Total All Roads	784,366	789,722	688,492
Commodities:			
Grain and grain products	51,252	52,491	52,341
Livestock	10,439	7,984	9,317
Coal	140,470	131,725	112,989
Coke	11,206	13,018	6,819
Forest Products	48,629	49,169	38,840
Ore	73,630	87,583	60,185
Merchandise l.c.l.	63,147	64,320	64,167
Miscellaneous	385,593	383,432	343,834
September 1	783,366	789,722	688,492
August 25	770,413	787,272	676,698
August 18	769,624	775,701	678,624
August 11	715,236	770,251	685,272
August 4	660,287	760,387	667,592
Cumulative total, 35 weeks	25,023,921	24,778,891	22,530,509

New Equipment

PASSENGER-TRAIN CARS

► *Boston Metropolitan Transit Authority.*—Ordered 25 2-car P.C.C.-type rapid transit units, Pullman-Standard; delivery is scheduled to begin next spring.

► *Chicago Transit Authority.*—Will convert 70 more P.C.C.-type streetcars to rapid transit cars at estimated cost of $2,900,000; builder not yet announced; CTA expects to achieve savings of $20,000 per car compared to purchase cost of rapid transit car built from completely new components; final order in the rapid transit phase of CTA's equipment program, covering another 70 rapid transit cars, is scheduled for bidding in mid-1957.

FREIGHT-TRAIN CARS

► *Lehigh & New England.*—Recent order for 400 70-ton covered hopper cars was placed as follows: ACF Industries, 200; Greenville Steel Car and Pullman-Standard, 100 each; allocation of order was given incorrectly in last week's issue.

New Facilities

► *Great Northern.*—Has announced construction of new trackage to serve the Minnesota Power & Light Co. at Cohasset, Minn., estimated cost $36,000.

► *Norfolk & Western.*—Seeks ICC authority to construct 5.2-mile branch line, including 1.56-mile tunnel; line, in Russell and Dickenson counties, Va., would tap coal mines with reserves aggregating approximately 140 million tons.

► *St. Paul Union Depot.*—New construction projects include installation of propane switch heaters in yards, estimated cost $102,000, and replacing manually operated passenger elevator with self-operating type, estimated cost $25,000.

► *Toledo, Peoria & Western.*—Constructing coal loading dock at Warsaw, Ill., estimated cost $60,000; completion scheduled for middle of September; dock will be used to transfer coal from railcars to barges and vice versa.

► *Union Pacific.*—Announced plans for new yard office, trainmen's locker building and installation of 1,800 ft underground communication cable and 1,700 ft two-way pneumatic tube system at Idaho Falls, Ida.; cost not disclosed; also new yard office and parking lot at Dallas, Ore.; estimated cost $50,000.

(Continued from page 8)
made by J. Benton Jones, vice-president, passenger sales and services. He estimated that this road's 1956 deficit from passenger-train operations will be $58 million—up $8 million from the 1955 deficit. He called the deficit "one of the most serious problems" confronting the PRR management, noting that in this year's first half it absorbed 47% of the freight operating net.

His road, Mr. Jones also said, has taken action to curtail unprofitable train services, and it has introduced new and improved equipment in an effort to attract business.

As to the Pullman business, Mr. Jones said the transportation of passengers in sleeping and parlor cars represents a "personalized luxury service which is very expensive to provide." From figures in his statement, he argued that fares have not kept pace with the general economy, and that the proposed basis would not be out of line with the general economic situation.

Other PRR presentations came from its manager of passenger sales, C. W. Getty, and its assistant comptroller, J. L. Heywood. The latter had data which showed that the six roads seeking increases in both Pullman and coach rates in 1955 had composite expense-to-revenue ratios of 145.4 for Pullman operations and 110.2 for coach operations.

Other statements were filed by the C&O's general passenger traffic manager, Hiram T. Askew, by the P-RSL's general freight and passenger agent, Ira L. Fish, and by passenger traffic managers of the Reading, LV, and N&W—W. D. D. Prince, Charles A. Barber and Everett L. Repass, respectively. A proposed master tariff which would publish the increases was submitted by the petitioning roads' publishing agent—A. J. Winkler, chairman, Trunk Line-Central Passenger Committee, Traffic Executives Association-Eastern Railroads.

Erie, DL&W and D&H Study Merger

Investigation of possible advantages to railroads and public announced by Johnston, Shoemaker and White; coordination of duplicate Erie-DL&W operating facilities not affected

An exploratory study to determine whether merger of the Erie, the Delaware, Lackawanna & Western and the Delaware & Hudson would be advantageous to the railroads, as well as the public, will be undertaken by a committee consisting of members of the railroads' boards of directors.

Announcement of the study was made last week by the presidents of the three railroads: Paul W. Johnston of the Erie; Perry M. Shoemaker of the DL&W; and William White of the D&H.

No Preconceptions—"We have no preconceived ideas of what can or cannot be accomplished by such a merger," the railroad presidents said in a joint statement. "That is the purpose of making the study by the board members. The managements of our respective roads are of the opinion that in view of the economic and competitive situations which exist today in the transportation field, the long-range future of the railroad industry and the service it can perform for the nation would be greatly improved and strengthened by merging railroad properties when it appears practical to do so. We believe the full-scale study which our directors are undertaking is a step in the right direction and is clearly in the public interest."

The three chief executives stressed that "no detailed studies have been made as yet on the many aspects that will have to be considered from an operating, traffic, financial and legal standpoint." If the merger were to become a reality, they said, the interest of all officers and employees would be protected in every possible way. They said past experience has demonstrated that because of the time required to conclude final merger proceedings, displacement of employees would be minimized.

DL&W - Erie Coordination —



NP Lounge Cars Sport Antique Touch

Five new "holiday lounge" cars have been placed in service on the Northern Pacific's "The Mainstreeter," road's second transcontinental. Cars cost about $1 million. Each accommodates 46 passengers, 14 in parlor car seats and 32 in lounge section. Etchings of early steam engines and replicas of old locomotive headlights, as above, lend traditional air.

The Erie and Lackawanna have been engaged in joint operating studies for the past year to take advantage of immediate savings by coordinating existing facilities (Railway Age, April 16, p. 36). Freight station operations already have been combined at Binghamton, N. Y., and Elmira. Negotiations for joint dispatching of tugboats in New York harbor are under way. Effective October 13 the Erie will begin to operate its passenger trains, except rush-hour commuter trains, into the Lackawanna's Hoboken, N.J., station, instead of into the present Erie station at Jersey City. Studies are also under way for joint freight yard operation at Buffalo, N.Y., and joint use of tracks between Corning, N.Y., and Binghamton.

Messrs. Johnston and Shoemaker emphasized that they plan to progress the coordination of these and similar duplicate operating facilities regardless of the outcome of the corporate merger study.

Standardization Seen Cutting Car Costs

Jenks cites lessons of mass-produced diesel locomotive—Sees advantages to railroads and builders who could intensify car design research

Standardization can be the key to reduced freight and passenger car costs in the future, Rock Island President Downing B. Jenks declared last week.

Addressing the Coordinated Mechanical Associations meeting in Chicago, Mr. Jenks said car builders must get on some kind of a basis where the cost of freight and passenger cars can be drastically reduced.

"But it will take your cooperation to make that possible," he advised the mechanical officers.

The Coordinated Associations include the associations of Air Brake, Car Department, and Locomotive Maintenance Officers and the Railway Fuel and Traveling Engineers.

The Rock Island president pointed out that in 1940 his road paid $117 per horsepower for diesel units, and by 1955 the per-horsepower cost was down to $105. Meanwhile, he said, steel box cars were increasing in price from 67 cents per cubic foot of capacity to $1.51.

The diesel locomotive, Mr. Jenks added, was something that could be produced on a production line basis, and this spelled the end of the costly tailoring that had prevailed with steam power.

"**Mass production** of the diesel made that type of motive power so inexpensive that railroads could not afford to pass it up," he declared. "In the same way, standardized freight and passenger cars can be made so inexpensive that railroads will find it inadvisable to develop special units of their own."

Standardized cars, Mr. Jenks continued, will offer a host of advantages to the railroads, including lower cost. He predicted that if a road were to retire a few cars, replacements could be obtained at "standard" cost for early delivery, eliminating the need to build up a large-volume replacement order.

In addition, Mr. Jenks said, builders would be able to carry inventories of steel and special parts, and would have added incentive to step up research into basic car design. Asserting that standardization should not be allowed to stultify progress, however, he suggested that builders develop "new models" as in automobile production to keep car fleets in line with the needs of patrons.

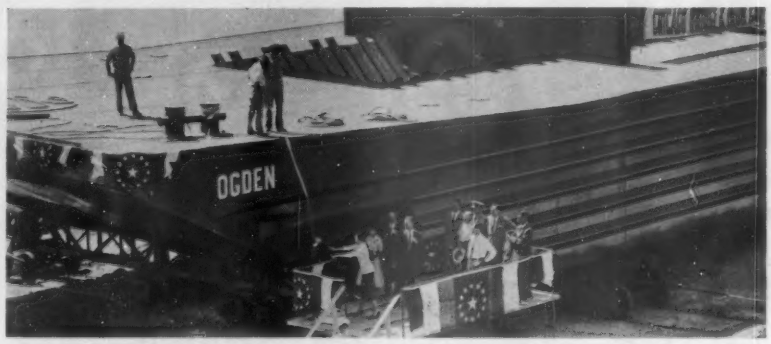
Another "dream," Mr. Jenks said, is the possibility of semi-permanent sides and ends for box cars and gondolas to permit major body changes without tying up expensive investments in trucks and underframes for long periods.

R. G. Chestnut, assistant to vice-president, Canadian National, stressed in an address to the RF&TEA that railroads are in an era in which innovation is replacing the stability of the past. He said that where emphasis in management has been on execution, it must be increasingly applied in the future to planning, supervision and control.

W. M. Keller, executive vice-chairman, Mechanical Division, AAR, told the LMOA that while "the diesel has done a good job, we must be on the lookout for still better power . . . The replacement of power by superior locomotives is necessary to keep railroads in healthy condition."

B&O, Lackawanna and PRR Expand T-O-F-C Territories

The Lackawanna has announced expansion of its piggyback services to reach several new points this month and next. The Baltimore & Ohio also announced stretching its t-o-f-c service as far west as Texas.



Launching Ceremony for SP's Salt Lake Navy

It's just a barge, but formal ceremonies were in order for the "Ogden," first unit of the Southern Pacific's pocket fleet of six drop-bottom barges being assembled at shores of Great Salt Lake in Utah. The vessels, plus seven deck barges, will carry rock and gravel for the railroad's new $49 million fill across the lake. (Railway Age, June 18, p. 54).

Through connections with the Bessemer & Lake Erie, a newcomer to t-o-f-c operations, the DL&W will provide the service between other points on its lines and Butler, Pa., and Pittsburgh, starting September 29.

On October 15, the road announced, it will start piggyback service to Evansville, Ind. (via Chicago & Eastern Illinois); Indianapolis (via Monon); Decatur, Ill. (via Wabash); and South Bend, Ind. (via the New Jersey, Indiana & Illinois).

The B&O move, said by President H. E. Simpson to be in response to increasing demands, brings cities in Arkansas, Louisiana and Oklahoma as well as the Texas cities of San Antonio, Galveston and Houston into its piggyback service area. Previously, the B&O service went through interline connections as far west as Minneapolis. Eight midwestern and western railroads are cooperating in the latest extension, the B&O said.

The Pennsylvania meanwhile announced that it has expanded its piggyback service to the southwest—up to now linking that area with Pittsburgh and Ohio cities—to include New York, Philadelphia and other eastern points. Fourth-morning service between New York City and Dallas and Houston is offered.



NYC Starts Truck Service

Leo L. Mellam (right) has been appointed president of the newly formed New York Central Transport Company. The new company, according to NY Central President A. E. Perlman (left), will provide substitute motor service in handling mail, baggage, express and LCL shipments over the entire Central system. Mr. Mellam formerly was general superintendent, operations, Watson Bros. Transportation Company of Omaha. Headquarters for the NYC trucking subsidiary will be at New York City.

ICC Can't Prune Passenger Service

The Interstate Commerce Commission has determined that it lacks authority to order discontinuance of an intrastate passenger-train service on the ground that losses therefrom result in an undue burden on interstate commerce.

The determination was made in a case (No. 31566) wherein the New Jersey & New York undertook to have the commission override the Board of Public Utility Commissioners of New Jersey and order abandonment of a train which is operating at an out-of-pocket loss of $30,000 a year. The train is No. 601 (formerly No. 613) which operates between Jersey City, N.J., to Spring Valley, N.Y., and provides intrastate service over which the New Jersey commission has jurisdiction.

The ICC's determination that it lacked authority to condemn the train as an undue burden on interstate commerce was based on its finding that the losing service was not a "rate, fare, charge, classification, regulation, or practice" within the meaning of those terms as used in that part of the Interstate Commerce Act (section 13) which gives the commission what power it has to override state regulatory authorities. Bills to provide specifically that these section 13 powers cover unprofitable intrastate services have been introduced in Congress in recent years, but they have failed of enactment.

Meanwhile, the commission did find itself with jurisdiction to consider that phase of the NJ&NY's plea which was based on the act's section 3, and which contended that operation of the train results in unreasonable preference of the relatively small number of intrastate passengers carried. The commission rejected the contention with a finding that no such preference had been shown.

Commissioner Clarke filed a concurring-in-part opinion to record his agreement with the disclaimer of jurisdiction under section 13, and his view that the commission also lacked jurisdiction to make a determination under section 3. Commissioner Walrath joined in the Clarke expression, and it was noted that Commissioners Freas and Minor concurred in the result of the majority report. Chairman Arpaia and Commissioners Mitchell and McPherson did not participate.

Commissioner Freas referred to the decision in a September 12 speech at Los Angeles, Cal. Noting the disclaimer of jurisdiction under Section 13, he added: "However, the question of the commission's jurisdiction to remove undue prejudice or advantage to a person or locality under Section 3(1) in such situations cannot be considered as settled."

NYC Seeks 6% Commutation Return

The New York Central hopes to put its commutation operations on a paying basis.

A petition filed with the New York State Public Service Commission requests authority to boost commuter fares on its two main Hudson and Harlem divisions serving New York City by an average of over 26%. It further proposes—in lieu of admittedly "unrealistic" 390% fare hikes—that it be allowed to abandon passenger operations on a third, lesser, division, the Putnam.

Declaring that the road is going before the PSC in the manner of public utilities, a spokesman said the increases sought "are based on the cost of performing the commutation service plus a 6% return to the railroad on its net investment of more than $60,000,000 in commuter service."

Central President A. E. Perlman said the petition is another step by the road to reduce its passenger deficit (see story on page 8). Mr. Perlman said "unless passenger service can be made profitable, the entire future of the railroad is in danger. Since the commuter business is not only a large business in any measure but, in fact, is the dominant class of passenger service performed by the railroad in this area, it must necessarily pay its own way."

Three unusual features marked the Central's filing of the petition:

A bid for public support by holding a press conference and distributing to homegoing commuters leaflets telling of the petition simultaneously with its filing at Albany; inclusion of its "whole" case in 30,000 words and 10 lb of printed testimony ap-

pended to the petition at the time of filing, so as to expedite matters; and provision for an equipment fund earmarked for commutation service through levy of an undetermined fee (in excess of the raised ticket prices). Central would estimate its receipts from this levy for the next five years and would immediately borrow an equal amount to buy new cars.

Harriman Safety Award Winners

Fourteen railroads which achieved the industry's best overall safety records in 1955 will receive the E. H. Harriman Memorial Awards from the American Museum of Safety at a September 19 dinner in the Hotel Roosevelt, New York.

Gold medals—which go to each of three railroads having achieved the best safety record in their respective size classifications—will be presented to the Atlantic Coast Line (group A), the Duluth, Missabe & Iron Range (group B), and the Bessemer & Lake Erie (group C).

The railroad industry's 1955 safety performance was one of the best in its history, James G. Lyne, chairman of the Harriman Award committee and editor of Railway Age, said in announcing the winners. He added that the railroads' passenger safety record last year was the best since the all-time high of 1952.

Certificates of commendation have been won by the following railroads: Pennsylvania, Illinois Central and Union Pacific (group A); Western Maryland, Nashville, Chattanooga & St. Louis and the Soo Line (group B); Lehigh & Hudson River, Richmond, Fredericksburg & Potomac and Texas Mexican (group C). Two switching and terminal companies—Portland Terminal and New Orleans Terminal—also won certificates.

Winners of the awards are determined by a special committee on the basis of official safety records of the Interstate Commerce Commission. Cyril Ainsworth, president of the museum, will preside over the dinner, and Mr. Lyne will present the awards. This will be the 37th year of presentation of the Harriman Memorial Awards.



Retirement Benefits Now Top $5 Billion

Clarence O'Brien (left), of Dalton, Ill., a 75-year-old retired switchman, receiving a check which represented the five billionth dollar paid by the Railroad Retirement Board in retirement and survivor benefits. The check and a testimonial were presented by Horace W. Harper (right), labor member of the board, and Thomas M. Healy (center), carrier member, at a special ceremony in the board's Chicago office. Since July 1936, when benefits were first paid, aged and disabled employees and their wives have received more than $4.2 billion, and the families of deceased employees about $830 million. Annual amounts paid for survivor and retirement benefits have increased rapidly until in the fiscal year 1955-56 retirement payments reached $458 million and survivor payments $143 million.

Organizations

American Council of Railroad Women.—Meeting will be held in the Roosevelt Hotel, New Orleans, La., October 1-3.

American Society for Testing Materials.—During the annual meeting, to be held in the Statler Hotel, Los Angeles, September 16-22, several sessions on the 18th will be devoted to discussion of railroad materials, including diesel fuels, lubricants and cleaning materials. At a railroad industry luncheon on the same day, J. W. Corbett, vice-president, system operations, Southern Pacific, will discuss "Research and Standardization in the Railroad Industry."

Associated Traffic Clubs of America.—Annual meeting will be held in Miami Beach, Fla., October 24-25. George Odiorne, director of the American Management Association's Intra-Company Management Program, will deliver an address on the traffic manager's place in the scheme of a company.

Great Lakes Regional Advisory Board.—The 97th regular meeting will be held in the Hotel Cleveland, Cleveland, Ohio, September 18-19.

Milwaukee Traffic Club.—Annual dinner will be held at the Milwaukee Auditorium, Milwaukee, Wis., September 19.

Railroad Human Relations Group.—Will hold its fall meeting at Northernaire, Three Lakes, Wis., October 3-5. Theme of the meeting will be "The Supervisor," and panel sessions will explore the subjects of Supervisory Identification and Selection, Supervisory Training and Development, and Appraisal of Supervisory Performance. I. M. Ferguson, assistant to president (personnel), Western Pacific, is chairman of the group.

Traffic & Transportation Association of Pittsburgh.—William J. Schwartz, of the Bessemer & Lake Erie, has been elected president for 1956-57.



One of the 160 Uses of CONCRETE on Railroads

NO. 33 OF A SERIES

This parking deck over the Nashville, Chattanooga & St. Louis Railway in Atlanta, Ga. was built with precast-prestressed concrete girders and channel deck slabs. The channel deck slabs averaged 4 ft. wide x 23 ft. 5 in. long. They rested on T-shaped girders averaging 18 ft. long x 2½ ft. deep. This type of construction was fast and economical.

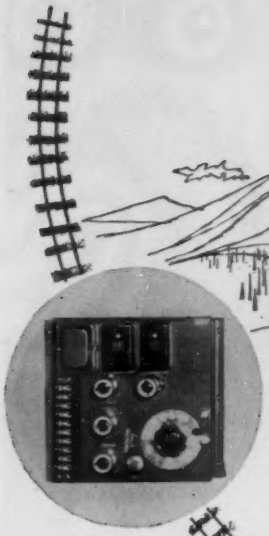
Prestressed concrete parking decks are just one of the more than 160 uses for portland cement and concrete which enable American railroads to improve service and save time and money. The moderate first cost of such improvements—plus their long life and low maintenance cost—result in true *low annual cost*. This saves money for other items.

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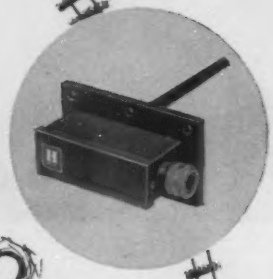
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Control panel for car interior type of installation provides "finger-tip control," plus easy-to-read dial, divided into both fresh and frozen food ranges.



Rugged Space Thermostat with sensing element can be mounted within the refrigerated space or in the return air duct. Electronic sensitivity makes it accurate to within a small fraction of a degree.

THE PROBLEM with mechanical refrigerator cars is how to maintain *constant* temperature through extremes of heat and cold. In the course of a single trip, frozen foods or fresh produce must be protected through mountain country or desert. This requires precision cooling in some cases—heating in others.

On the Frigidaire installations for Pacific Fruit Express this control problem was solved with Honeywell's electronic control system. The system maintains the exact temperature required *automatically*. It controls both the heating and the cooling of cars dependably, accurately and safely.

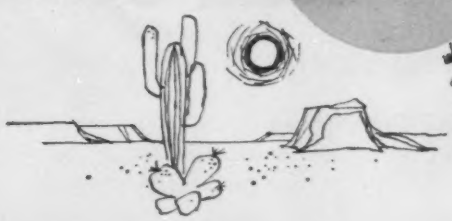
The Honeywell Temperature Control System costs less to install. Maintenance costs are lower too, because of complete accessibility. It is also the simplest system to operate. The easy-to-read, one-dial control panel (see illustration) indicates temperature settings. Yard personnel can check or change setting without complicated instruction or training.

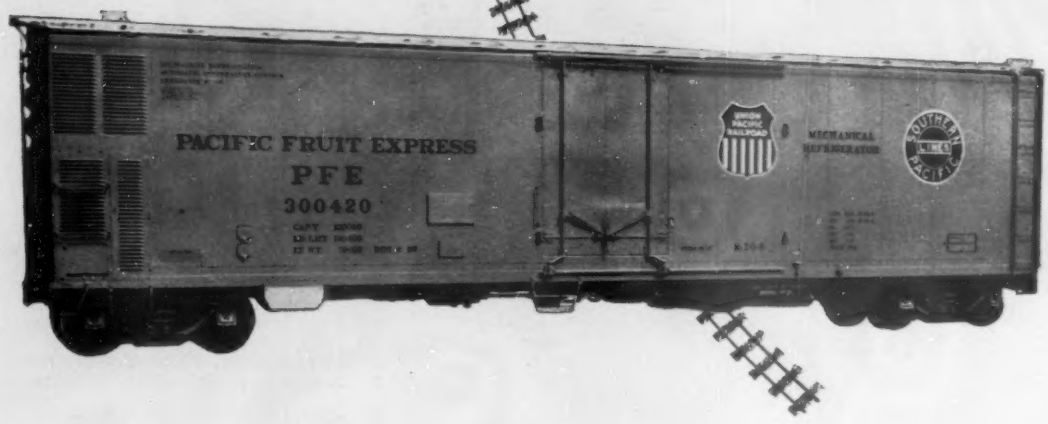
The Honeywell Electronic Temperature Control is a proven system that has been used for over 1½ years by several refrigerator car lines throughout the country. Get complete detailed information by writing to Honeywell, Dept. RA-9-185, Minneapolis 8, Minnesota.

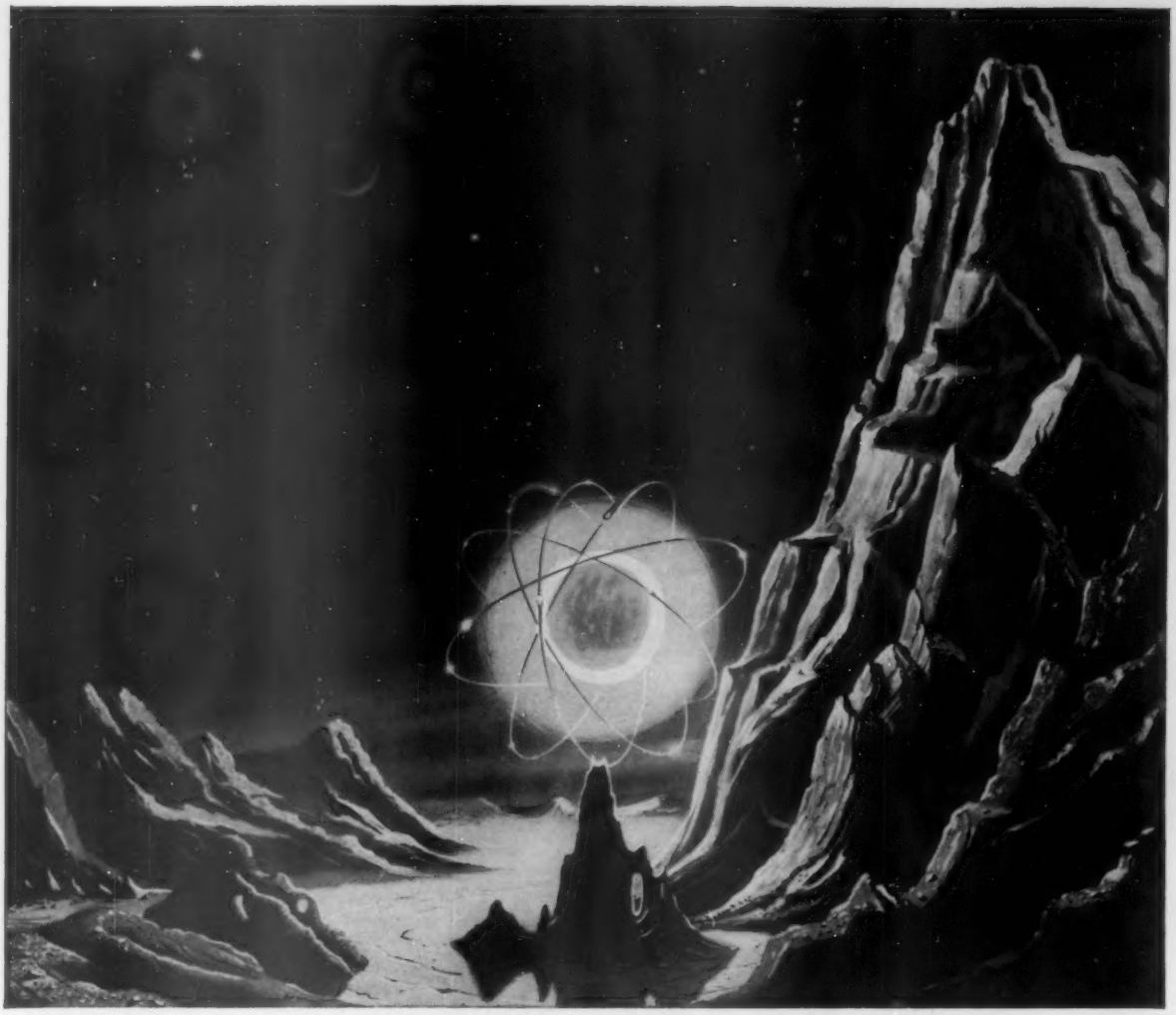
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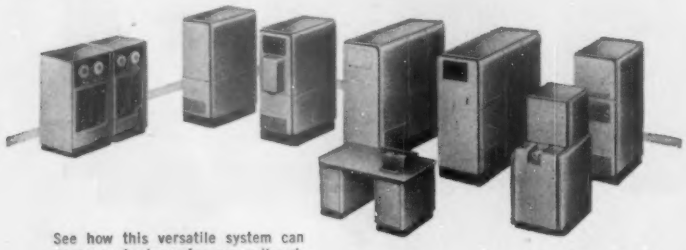




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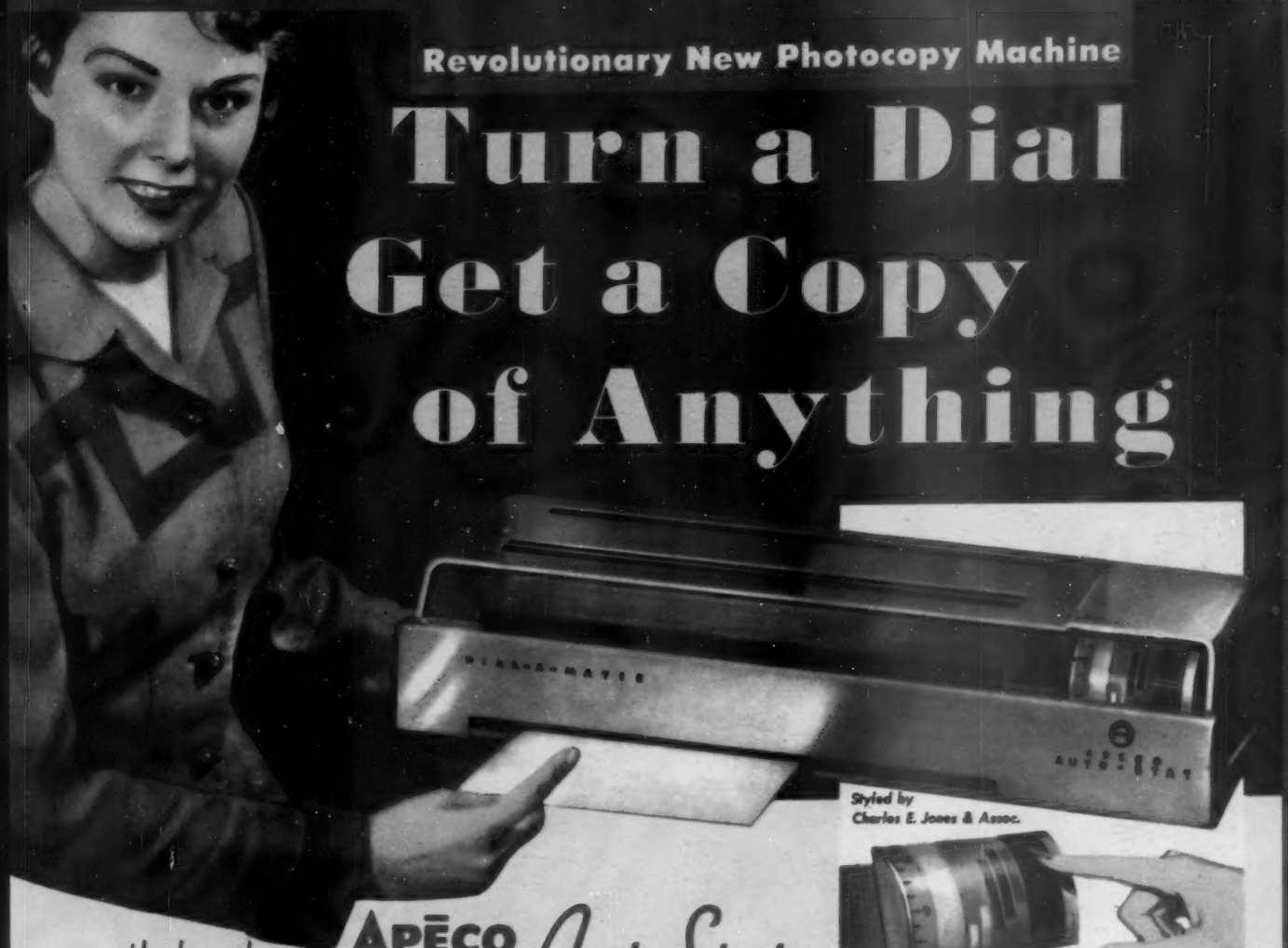
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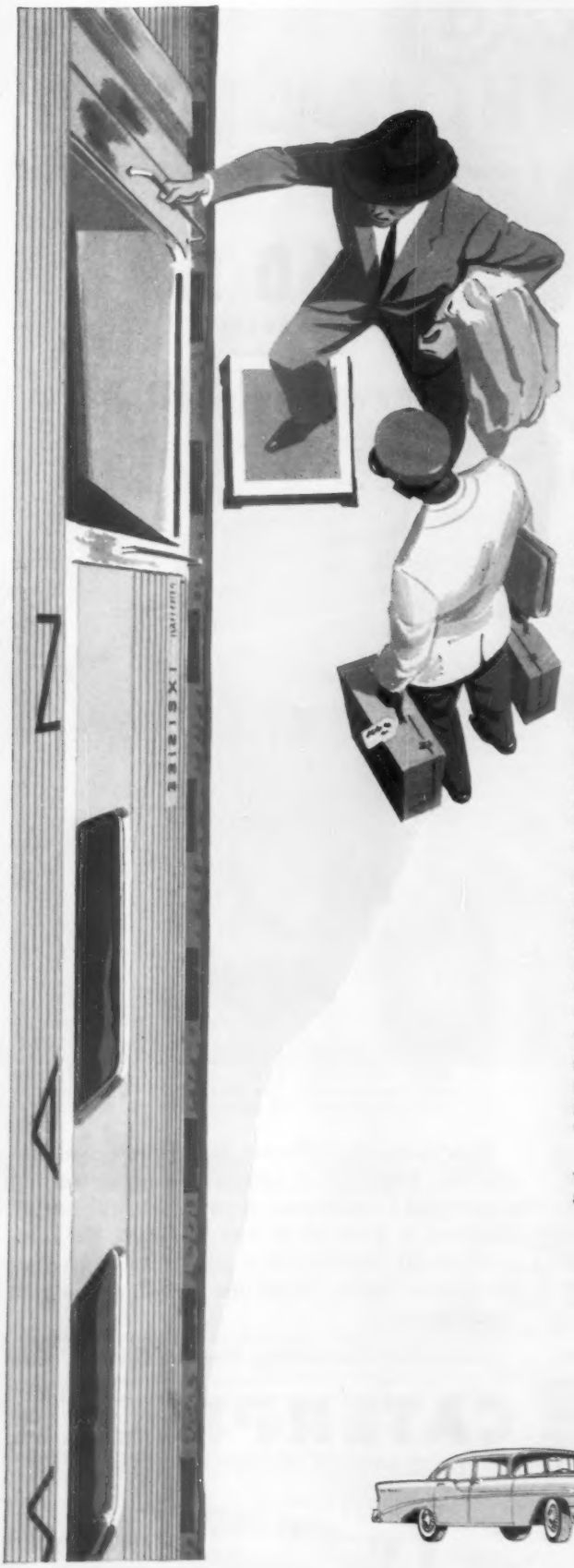
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One More Use Of "Across the Board"?

There's no doubt about the railroads' need for additional revenue. The question arises about what's the best way to go about getting it. And when we think of revenue, is it next year's revenue, only, that is being considered—or is it revenue over the next five or ten years?

There are two quite different approaches to dealing with problems which confront the management of a business enterprise. One is the approach popularly known as "putting out fires." The other is that of foresighted strategy, where all relevant factors are taken into account—and decisions are carefully weighed for their ultimate effect.

There are times in every business when the "putting out fires" technique is the only one that will serve effectively. But what about the man whose roof has leaked every time it has rained for the past ten years—and who, in all that time, has not yet found the means to provide himself with an effective new roof?

New Remedy Needed

The "across the board" rate increase device—to offset inflationary rises in costs (and, perhaps, to compensate in part for traffic lost because some rates are already too high), has served the railroads a dozen or more times since the end of World War II. Undoubtedly this device had to be used in the period right after the war. But isn't it about time that some more effective device for protecting revenue be discovered to replace this emergency technique?

There has been sufficient time since the war, surely, to have developed almost everything there is to know about what rates can safely be raised without traffic loss; and what rates should be lowered, because such reductions will attract enough new business to bring increased net earnings. If the railroads do not yet have this information in sufficient specific detail regarding all important commodities—then isn't it time that they should begin to assemble it? The "across the board" technique will not work forever.

For example, the persistent use of this device undoubtedly has had a great deal to do with the continued and alarming decline in the railroads' share of total traffic. In 1946 this share was 66.6 per cent. In 1955 it was estimated at 50.0 per cent. Furthermore, across-the-board raises don't "stick." Since the war, overall rate increases authorized by the ICC have totaled 88 per cent, but present average revenue per ton-mile is only 41 per cent above 1946. This disparity is due, of course, not only to specific rate reductions which have followed general rate increases—but also, and more unfortunately, to progressive railroad loss of high rated tonnage.

When "emergencies" get to occurring with dependable frequency, they cease to be emergencies. They become a chronic and routine condition which should be dealt with by long-range planning. A municipality may charge off to inexperience its failure to be prepared for one or two major floods. However, after a half-dozen inundations have been suffered, it is pretty hard to avoid the conclusion that long-range protective measures are called for.

The Alternative

It would be a big job—but entirely possible and quite profitable for the railroads—to ascertain with unquestionable accuracy such information as: (1) the actual comparative cost of movement, by rail and alternative methods of transportation, of all important commodities to all important destinations, as well as the volume of all such movements; and (2) the comparison of actual rail rates with such cost data, revealing—

(a) What rates may safely be increased (and how much) without sufficient traffic loss to bring a decline in net revenue;

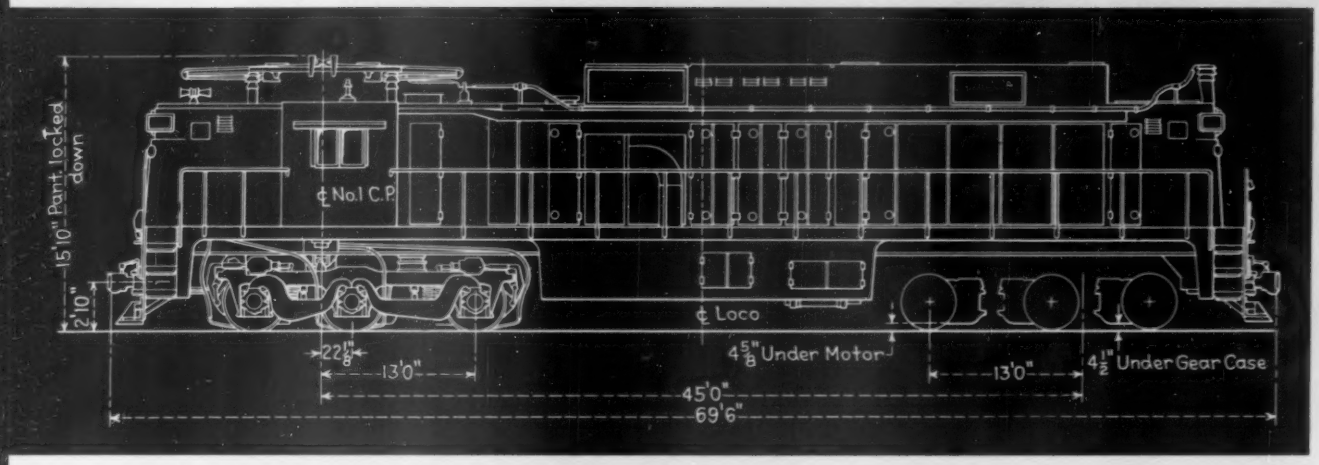
(b) Those rates which are already producing maximum potential revenue and which, if increased, will incur a revenue loss; and

(c) Those rates which, if reduced, would attract sufficient new traffic to produce an increase in net revenue.

Rate-making in the past has depended largely on individual judgment—some of it good; some only moderately so. But individual intuitive judgment, even of the wisest men, is no match, today, for the cold analysis of voluminous factual data—which modern mathematical, sampling, and data-processing techniques have made highly reliable and relatively inexpensive. The information is obtainable by which rate-making can be made as unequivocal and almost as "scientific" as engineering. The electric utilities have already, for the most part, attained an approximation to that happy position.

It is not the intention to suggest here that one more use of the "across the board" technique can now be avoided—seeing how relatively little appears to to have been done toward laying the groundwork for systematic long-range rate strategy. But, if it has to be used once more, then should it not be with the understanding that this is positively the last time—and that machinery will be set up to deal henceforth with the revenue problem on a continuing long-run basis?

Whether or not the railroads are in private ownership ten years from now may very well depend upon the intelligence and speed with which they now tackle the problem of introducing modern and realistic methods in the pricing of their transportation services.



CAB is situated between two hoods, one much longer than the other.

New Electrics Pack Power

Twelve rectifier-type locomotives will add zest to heavy-freight performance on Virginian electrified section

By J. P. WILES
Locomotive and Car Equipment Department
General Electric Company

In June 1955 the Virginian ordered twelve rectifier-type locomotives for delivery beginning in October 1956. While basically similar to the New Haven rectifier locomotives (described in Railway Age, April 11, 1955, p. 47), those for the Virginian are to be used in low-speed, heavy freight service instead of high-speed passenger service.

The original locomotives built for the Virginian electrification in 1926 were of the phase converter type with induction motors for traction. These were supplemented in 1948 by motor-generator locomotives with d-c traction motors similar to those used on diesel-electric locomotives at that time.

One reason for the renewed interest in electric locomotives by railroad personnel is the fact that both motor-generator and rectifier locomotives are able to operate efficiently under the existing high voltage a-c trolley wire and, at the same time, make use of the standardized d-c traction motor with all of its inherent advantages.

Each unit is rated at 3,300 hp, has a maximum operating speed of 65 mph and a maximum tractive force of 98,500 lb.

Power at 11,000 volts, 25 cycles is fed directly to the transformer. The secondary tap switches on the transformer tank supply a variable voltage to the twelve ignitron rectifier tubes connected three in a group in a bridge connection. The rectified power flows through a smoothing reactor to the six GE-752 traction motors, one on each axle. These motors are permanently connected two in series, three pairs in parallel. Speed-tractive force control is provided by tap changing on the transformer secondary, and by using resistors in series with the motor armatures.

The auxiliaries, such as the motor-generator set, compressor motor and equipment blower motor, operate from a 196 volt tap on the transformer secondary. All of these are single-phase induction motors thus eliminating maintenance of commutators and brushes.

Since the locomotive is required to haul heavy tonnages over steep grades, the braking equipment is important. Standard 24RL brakes are used and sand is delivered to all axles for operation in either direction. Dynamic braking is included for speed control on descending grades. The motoring resistors serve also as braking resistors. They are forced air cooled, the amount of air delivered to them being dependent upon the load they are carrying.

The single operating compartment, extending the full width of the platform, is placed next to the short-end hood. Access can be obtained form either side of the locomotive, or from the nose.

Transformer Arrangement

The equipment hood extends from the operator's compartment to the rear end of the locomotive. The forced Pyranol air-cooled transformer, located next to the operator's compartment, utilizes the full width and height of this section. Included on the transformer are the tap switches that supply a variable voltage to the rectifier and traction motor, a Pyranol pump to circulate the transformer coolant, and other switch gear necessary for the circuit operation. The 11,000 volt high-voltage bushing extends from the top of the transformer through the roof so that the 11,000 volt circuit is confined to the roof. Canopies ex-

tend over the outside walkways underneath the pantograph area to protect personnel from contact with the high voltage.

Adjacent to the transformer switch gear is a high speed, air circuit breaker to limit the current on arc back.

Protection is also provided for short circuit and ground faults occurring in the transformer and traction motor circuits. The auxiliaries have their own overload protection.

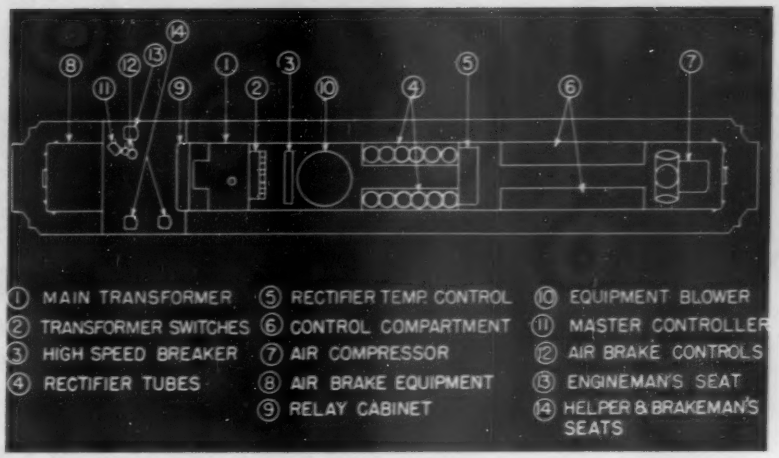
Twelve main circuit, power rectifier tubes with their firing circuit apparatus are located in two cubicles separated by a middle aisle. Four iron core current balancing reactors are placed between the rectifier cubicles while the main smoothing reactor is underneath the platform below the rectifier section, thus minimizing the undesirable magnetic effects of the reactor and helping to lower the center of gravity of the locomotive.

Also included with the rectifier compartment is a water pump and temperature regulating system necessary to maintain the temperature of the rectifier tubes within desired operating values. A three-way regulating valve insures that the water temperature is closely controlled at approximately 43 to 50 deg C. The rectifier coolant is cooled by a water-to-air heat exchanger in an air duct in the cab underframe. From here it is distributed to the transformer, reactors and traction motors.

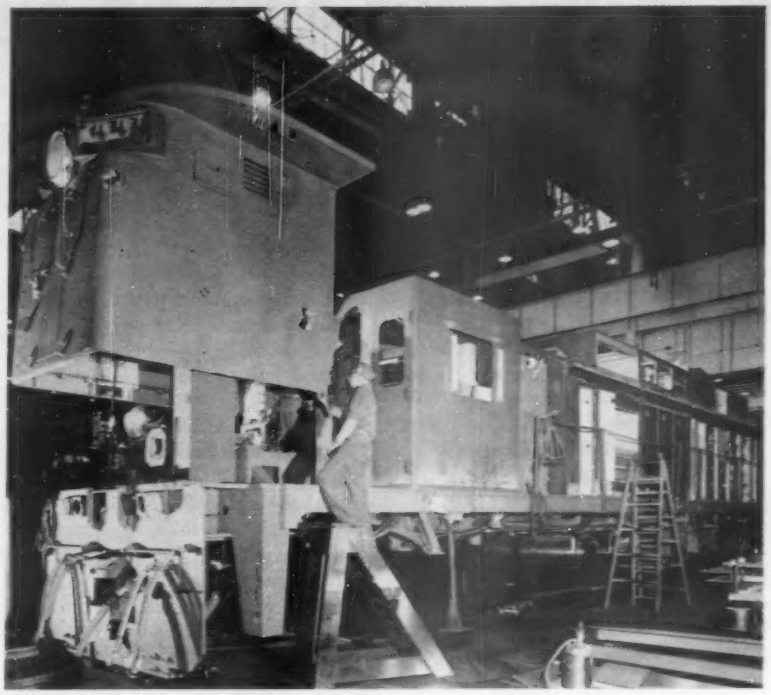
The majority of the control equipment is contained in two control sections, separated by an inside aisle and accessible from either the inside or outside of the locomotive.

Operating requirements dictate that the locomotive must be capable of being operated two, three or four units in multiple in either direction. Since they are classified as road-switcher locomotives, they must be capable of doing both types of service.

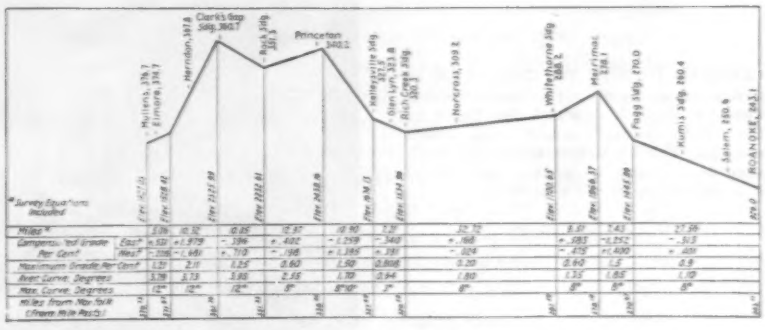
When these locomotives go into service, they will operate two in multiple the majority of the time. They will be expected to perform the same duties as the General Electric 6,800-hp EL2B motor-generator locomotives in service on the Virginian since 1948. After receipt of these twelve rectifier locomotives, the Virginian plans to retire 36 thirty-year-old electric locomotive units.



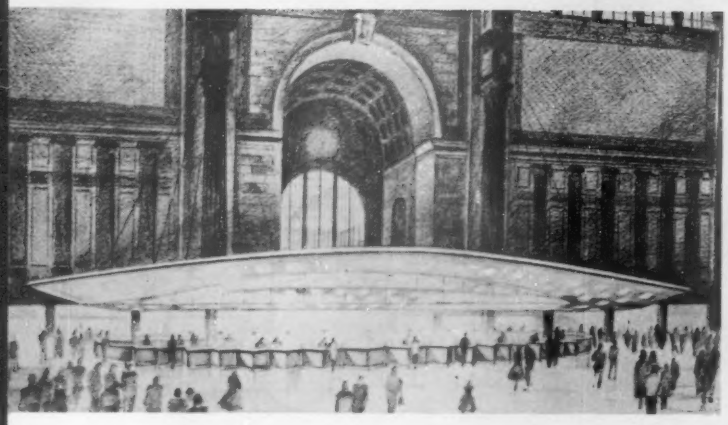
EQUIPMENT is located for easy accessibility.



ROAD-SWITCHER design delivers 3,300 hp at 65 mph.



PROFILE of the electrified section of the Virginian.



THE NEW LOOK IN NEW YORK'S PENN STATION is the passenger ticket sales and service bureau which features closed-circuit TV receivers at ticket counters around its periphery. When in service at the end of this year customers will find . . .

Reservations Sold on Sight

The Pennsylvania is spending two million dollars to modernize ticket selling facilities in Pennsylvania Station at New York. One hundred TV cameras and 96 receivers will enable ticket sellers to see Pullman and reserved seat coach space available to and from any of 76 designations. In addition to the TV network, facsimile will be used for "sending" the space coupon from the file to the ticket sellers.

You See What You Buy

Here's how ticket selling will be accomplished. A passenger walks up to the counter and requests a double bedroom to Chicago and return. The ticket seller reaches for a convenient telephone dial, and dials a two-digit number. Instantly the 14-in. TV screen on the counter shows a diagram of Pullman space available on all trains to and from Chicago for the next two weeks. Incidentally, every seller can "tune in" on the board without waiting.

After our passenger selects his bedroom going and return, the ticket seller dials another two-digit number which makes it possible for him to see and talk to the space distributor who will fill the order. The customer will be able to see and hear this "man in the back room" who is waiting on him. On receiving the order, the space distributor puts the coupon, similar to a theater ticket, into a facsimile sending machine which produces a facsimile copy of it in a receiving machine directly in back of the ticket seller. While this is going on, the ticket seller will insert a metal type plate into a slot in his Ticketeer machine which will automatically print a first class rail and Pullman revenue ticket.

TV Cameras Everywhere

"Behind the scenes" work at the new bureau will be "out in the open," because of the extensive use of television cameras. Pullman space and coach seat reservation coupons are in racks as before, but atop each rack are charts showing space available to all train and car destinations. Permanently mounted cameras are focused on these charts—there being 37 of these cameras. Other cameras cover the same general area to televise space distributors who fill telephone reservation orders and fill over-the-counter purchase orders.



CLOSED-CIRCUIT TV RECEIVER at ticket selling counter enables both customer and clerk to watch the "man in the back room" select the space coupon. The customer chose his Pullman reservation when the space chart was shown on the TV screen.

Forty cameras are used to "flash back" individual space coupons to telephone and special handling sales clerks on reservation orders, including two cameras at parlor car space files. In addition, a camera is focused on the incoming train bulletin board, so that all positions equipped with TV monitors can "tune in" simultaneously on the board.

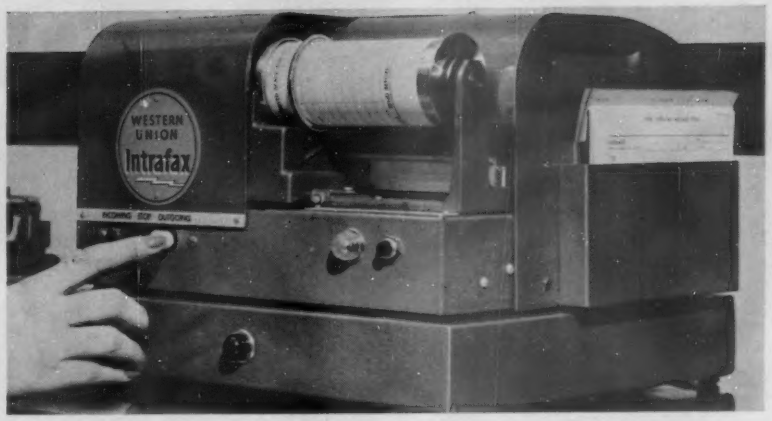
Handling Phone Reservations

When a customer phones the station, his call is automatically routed to one of the 72 telephone sales clerks. The clerk, upon hearing the request, dials the proper availability camera and "gets a picture" of all space on all trains to the destination on his TV screen. There is no waiting because, if necessary, every one of the 72 positions can look at the same board at the same time. The clerk then tells the customer what is available.

Upon obtaining the specific request from the customer, the telephone sales clerk dials into the proper coupon file section which activates a Telautograph receiver and flashback camera adjacent to the appropriate coupon rack. As the telephone clerk writes the message, a copy is instantly reproduced on the Telautograph receiver in the space file section.

The space distributor, after selecting the coupon, places it under the flashback camera located directly over the Telautograph receiver. In this case, the flashback camera is "hooked" to the Telautograph receiver and because the telephone sales clerk controls the circuit, only what appears on the flashback camera (being placed there as a result of the Telautograph order) will appear on the telephone sales clerk's TV monitor (receiver).

The space distributor (in the back room) then puts the coupon in the reservation file—or in a facsimile machine for sending to an outstation for pick up if the customer so requests. In this latter instance, when the customer picks up the space at the outstation (e.g., the downtown city ticket office), this outstation transmits a sales confirmation report which is authorization for the central bureau to remove "reserved" space from the reservation file and mark as "sold." In all cases, time limits are controlled by the central bureau.



INDUSTRIAL CUSTOMER sends request for tickets, Pullman reservations, or train arrival and departure times on this facsimile machine. Leased Western Union circuits provide instantaneous two-way facsimile communication between customer's office and . . .



PENN STATION TICKET SALES and service bureau. Intrafax equipment consists of receiver (left), switchboard (center) and transmitter (right). As now planned, the facsimile system will link firms in Greater New York, but will be extended to the suburbs within a 25-mile radius.

FACSIMILE FOR INDUSTRIAL TICKET SALES

Customers in New York will be able to have their Pullman and reserved seat coach tickets reproduced for them in their own offices by direct facsimile transmission from Pennsylvania Station without going to a ticket office. This will be made possible by use of a special Western Union Intrafax private wire system linking the new ticket sales and service bureau with scores of large industrial companies and other organizations regularly using rail travel.

Each customer will be equipped with a sending and receiving facsimile machine, into which will be fed requests of that company's officials and employees for tickets and reservations. The operator will merely place a special form provided for the purpose on the machine and press a button. Instantly the form whirls before an electric eye and an exact reproduction is received by the railroad as a picture reproduction of the original form. Requests can be made for any type of reserved space from the simplest one-way trip on the Pennsylvania to a complex interline transaction involving many connecting railroads.

The facsimile Pullman or coach ticket that is sent to the customer's office to fill his request becomes the only valid and usable voucher for his reservation. It arrives in a three-part form: (1) the passenger's Pullman or reserved coach ticket which he presents to the conductor; (2) the passenger's receipt; and (3) the stub which provides an office record for the subscribing firm. To cancel his reservation, the customer marks his ticket to indicate that it is to be cancelled and transmits it by Intrafax back to the railroad.



BRIDGE under construction to carry the new line across the Magdalena river. Swampy nature of terrain is apparent from the amount of water that can be seen along the new roadbed.

468-Mile

NEW RAILROAD SPARKED BY INDUSTRIAL DEVELOPMENT

Construction of a new railroad in Colombia is a logical step in view of the rapid rate at which the country's natural resources are being developed, and the accompanying industrialization of the country. The whole process is being accelerated by steps that have been taken by the Colombian government to encourage the flow of foreign money into the country.

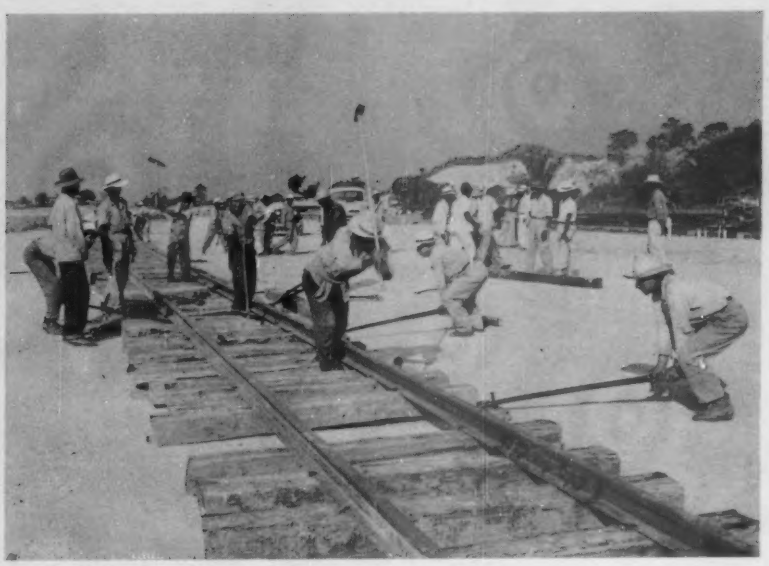
Large oil reserves lie along the route of the new line. Four American oil companies have investments here and are helping to make Colombia ninth in oil production.

Heart of this industrial development is the city of Cali in the fertile Cauca valley. Hydroelectric power is being developed here, and more than 50 American companies, including such big outfits as Armco, National Carbon and Goodyear Tire & Rubber, are helping the process of industrialization. A steel manufacturing industry is being built and it is expected that after 1959 the new steel works will be capable of supplying enough rail for replacements on the new railroad as well as for the government-controlled railway system as a whole, totaling 1,600 miles of line.



SHORT-CUT between the Caribbean and industrial area centering around Cali in the southern part of the country will be provided by the new line.





MANUAL METHODS, being used in laying this 75-lb rail section on untreated hardwood ties, cut locally, contrast strongly with . . .

. . . MODERN EQUIPMENT, including crawler and rubber-tired units, used in building the roadbed.

Short-Cut to the Sea

New railroad line, scheduled for completion in 1958, is being built to connect Colombia's industrial area with ports on the Caribbean

What is said to be the longest stretch of railroad ever built in Latin America at one time is well under way, with 1958 set as the completion year. When finished, the new line, 468 miles long, will provide a link (see map) between the rapidly developing Cauca valley in western Colombia and the ports of Santa Marta and Barranquilla on the Caribbean sea.

At present, goods moving between the industrial and agricultural heart of Colombia and the Caribbean are handled through Pacific Coast seaports and the Panama Canal. There is an inland waterway route via the Magdalena river, but when the river is low, this trip is said to take as long as two months. Completion of the railroad will reduce the time to less than two days.

Started in 1953, the new line begins about 75 miles northwest of the Colombian capital of Bogota, where it connects with an existing rail line at Puerto Salgar. It will follow the Magdalena river for about 250 miles, but will then swerve to the east to avoid swampy terrain. Its northern terminus will be Fundacion which is already connected with the Caribbean port of Santa Marta by a 58-mile rail line. In addition a highway for railroad operated tractor-trailer units is being built to Barranquilla.

Estimated cost of the new railroad is $80 million. It will have a gage of 3 ft and is being built of 75-lb rail laid on native hardwood ties, untreated. Gravel ballast, obtained locally and screened or crushed to size, is being used.

Methods of construction include a combination of the old and the new. Track-laying work is done mostly by hand, but in contrast the grading is being carried out with the most modern equipment. A maximum grade of 0.5 per cent has been established, requiring cut and fills ranging up to 100 ft in depth. The terrain is rolling, and is often covered with dense jungle growth. About 60 steel bridges will be required, including two over 1,000 ft long across the Magdalena river.

The project is an undertaking of the country's Ministry of Public Works and government-owned railways. The work is being done under the guidance of the Madigan-Hyland South American Corporation, a New York engineering firm. The undertaking is being financed by a government appropriation and with the aid of loans totaling $40,900,000 from the International Bank for Reconstruction and Development.

Advertising Does Build...

...Off-Peak Riding

"Samples" of passenger train riding, saturation-type local publicity and touting advantages of going to the city fill seats in the dull hours



EACH SATURDAY the Reading selects a single suburban community for a trial 25¢ excursion to Philadelphia. Newspaper, pinpointed advertising, plus saturation-type direct mail campaigns, pull up to 1,150 riders.

INTENSIVE PROMOTION has produced a 50% lift in non-rush hour riding on the Reading's suburban lines.

An increase of more than 50% in passengers utilizing one-day round-trip "shoppers' tickets" in its Philadelphia suburban area is attributed by the Reading, in important degree, to a vigorous program of custom-tailored local advertising.

The railroad's program was not based upon hunches. It was launched only after Opinion Research Corporation had made for it a thorough-going survey of the shopping and travel habits of women in suburban Philadelphia.

The program has been marked by newspaper advertising, car cards, station posters, and, for the first time perhaps, on any suburban railroad operation, *saturation-type,* direct-mail advertising.

The Reading has had in effect, since December 1936, special round-trip fares with a one-day return limit, applicable from suburban towns to downtown Philadelphia. The rates for these "shoppers' tickets" are based on a sliding scale—the rate per mile decreasing generally with distance. The farther out the point of origin, the more closely the round-trip fare approaches the one-way fare. From Doylestown, Pa., 35 miles out, for example, the one-way fare is $1.23, and the shopper round-trip ticket only $1.25.

While the continuance of these fares, obviously, indicates that they were successful in attracting off-peak passengers, nevertheless the passenger and public relations departments came to the conclusion that an all-out effort should be made to publicize the fares and the service they purchase. The promotional program was also motivated by the rapid growth of suburban communities around Philadelphia, creating a substantial volume of potential new passengers who had little or no knowledge of available train service and fares.

The advertising program was initiated early in 1953. That year showed a 13% increase in both passengers and revenues from shoppers' tickets. In 1954 revenues increased 5% and the number of passengers increased 3% (the disparity resulting from a longer haul per passenger). In 1955 shoppers' tickets



produced a still further increase of 9% in passengers and 10% in revenues. With these successive annual increases behind it, January 1956 showed a 52% increase in revenue compared with the same month in 1952. There appears to have existed no abnormality in either month which would unduly affect the comparison.

Travel Survey

For many years keenly interested in Philadelphia traffic problems, and an articulate spokesman for more common sense in solving traffic problems, Reading's President Fisher authored the idea of engaging Opinion Research to find for the railroad a basis for its marketing approach. As he reported in a recent speech, "The results were both enlightening . . . and encouraging."

Here is what the railroad learned, according to Mr. Fisher:

"We found that shopping is the overwhelming reason for women to travel to Philadelphia. But to supplement the appeal for shopping, it was found that emphasis should be placed on other-than-shopping attractions — such things as entertainment and educational and cultural features.

"We found that travel time and difficulties—traffic and parking—were a major deterrent to visiting the city. And we were pleased to learn that rail transportation is favored by a majority of women in the communities surveyed. There was general recognition that rail travel is cheaper, faster and more comfortable than automobile travel . . . and it eliminates parking and traffic problems.

"And we were interested to find that these suburban housewives say that the cost of transportation is not a major factor deterring them from coming to Philadelphia.

"With this information in hand, we undertook a promotional campaign."

The conclusions in Opinion Research's marketing study have been published by the Reading in a 16-page pamphlet which has been made available to civic and business leaders in Philadelphia, in the belief that it may give them the raw material for plans and efforts to stem the "flight from downtown," characteristic of practically every large city in the country.

Among other things in the booklet is a finding that "efforts to promote additional travel to the city will probably be most effective if that campaign [includes] . . . appeals based on the entertainment, educational and cultural features offered in the city."

Newspaper Advertising

The basic medium for the Reading campaign is continuous advertising in suburban newspapers. The copy for these ads—which is linked, when possible, with the study of women's preferences—sells two things: (1) the advantages of visiting Philadel-

phia, and (2) the advantages of using low cost shoppers' tickets and travel by rail. Whenever possible, copy in the ads makes reference to the marketing study.

Give 'em a Sample

Taking its cue from the merchandise field, the railroad also came to the conclusion that an appetite for train travel can be created by giving away a sample.

Since, however, free rides on trains would create an almost impossible job of control and handling, it was decided to provide "sample" train rides at a rock-bottom 25¢ a round-trip. Each Saturday a single suburban community is selected for a trial 25¢ "excursion" to the city. Public interest is built up prior to the excursion date by local newspaper advertising, direct mail, and station broadsides.

Patronage of these Saturday sample ride excursions—the second series of which are now under way—reaches as high as 1,150 persons.

The Reading believes it is one of the first transportation agencies in the country to use direct mail advertising to promote suburban passenger business. Key suburban communities are selected for experiment, and results of the program are carefully watched.

Direct Mail Advertising

For the purpose the railroad uses an established direct mail house whose lists contain virtually every household in a community. Mail is addressed to each household by name and address.

In each case, the envelope comprises:

1. A letter produced by offset, with the salutation "Dear Friend and Neighbor," signed by the road's passenger traffic manager, W. D. D. Prince, which calls the recipient's attention to educational and cultural attractions in Philadelphia; sets forth the precise price of shoppers' tickets from his home town; and locates the local Reading station;
2. A wallet-size timetable of suburban train service between the individual community and Philadelphia;
3. A pamphlet showing round-trip fares between all suburban communities and Philadelphia; and
4. An illustrated pamphlet entitled "Philadelphia in the (Fall, Spring, Summer, Winter)" which lists points of interest and contains schedules of concerts, plays and sports events.

To date the Reading believes that its direct mail advertising is effective in pin-pointing individual markets for suburban passenger traffic, says Harry E. Hammer, director of public relations.

Radio spot announcements were also tested in the beginning of the advertising program but have been discontinued because it was found that, in relation to cost, they did not spread specific information about fares and schedules.

Railroading

After Hours

by James G. Lyne



Editor, Railway Age

Townspeople as Friends

David L. Keith of Peoria—who handles public relations for the TP&W—offers an answer to the "Crowson question" (i.e., what railroads can do for desirable contacts with Mr. and Mrs. America, in view of the decline in passenger traffic). He reminds us of the TP&W's "Willie Awards."

Local TP&W agents receive nominations for the local citizen who has done the most for his town during the year—and the TP&W has a dinner at which this citizen is honored with the symbolical "Willie." Local newspaper advertising sees to it that the townspeople know about their public-spirited fellow townsman and TP&W's recognition of him.

Dave has a check list of cogent reasons why a railroad—even more than most other industries—needs to be known favorably in the communities it serves (not only for legislative impact, but also for closer-home relationships, such as grade crossing protection, fair treatment by jurors in claims cases, taxes, industrial development). He also has a check list of 17 objectives for a community relations program, which doesn't seem to omit anything.

Is RR a Utility?

A well-known public utility executive told a railroad executive and me the other day that he thought the railroads might profitably adopt the "public utility attitude" toward their business. He described this viewpoint as one concerned with making every operation pay a reasonable return—i.e., 6 to 8 per cent; and, conversely, not trying to make any operation pay in excess of that return.

If you get all your money-losing services on a basis of paying their way, then you no longer have to try to make an offsetting high return on any other parts of your business—and this gives you a big competitive lift in bargain-pricing your service against the temptation of some big customers to supply their own transportation (or electric power). Something to think about.

More Boomers

I mentioned the educational advantages of "booming" in this space recently and named a couple of outstanding boomers to illustrate the point (viz., John Barriger of the P&LE and Loyd Kiernan, U.S. adviser to the Spanish railways). The distinguished head of the N.Y. subway system, Charles Patterson, asks me whether I believe he qualifies for this honored company. He certainly does. In the compass of five years he held vice-presidencies of three different railroads, prior to his present assignment—undoubtedly one of the most challenging transportation jobs in the country.



This is the ninth in a series of advertisements about the people of Standard.

Expert at getting cars on the line
..and master of gin rummy

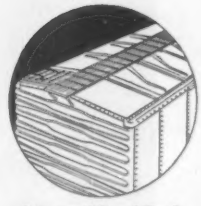
Meet Don Petersen.
He's Standard's Vice President in charge of operations. In his leisure hours Don takes on all comers at gin rummy, cribbage and golf—and in all three is a tough competitor.

On the job Don Petersen is the man behind the man who calls on you. He's an important part of Standard's tradition of service. He makes sure of the constant flow of Standard products—parts that come to you when and where you want them—as ordered.

Don's responsibility covers all of Standard's plant operations. Like all the Standard team, he is first and foremost a service man.

Whether your order is for one car or hundreds—for new car parts or replacement on existing equipment—you can depend on Standard to get cars on the road, paying their way.

Improved Dreadnaught Ends



Diagonal Panel Roofs

9 out of 10 house cars now in operation on America's railroads are equipped with Standard Ends and Roofs.

GEARED TO PROGRESS
P R I
MEMBER

Standard RAILWAY EQUIPMENT MANUFACTURING COMPANY

General Office: 4527 Columbia Ave., Hammond, Ind. • New York • Chicago • St. Paul • San Francisco
Standard Railway Equipment Manufacturing Company, (Canada) Ltd. Sun Life Building, Montreal

BEFORE YOU BUY A PACKAGE BOILER

CHECK THIS LIST!

If you need a package boiler, the list at the right can give you some interesting answers. Of course, C-E's Type VP Boiler rates a "yes" answer to every question. It offers also many other operational advantages, such as simple, effective soot blowing; high heat absorption; low draft loss, no dead gas pockets and simple baffle arrangements.

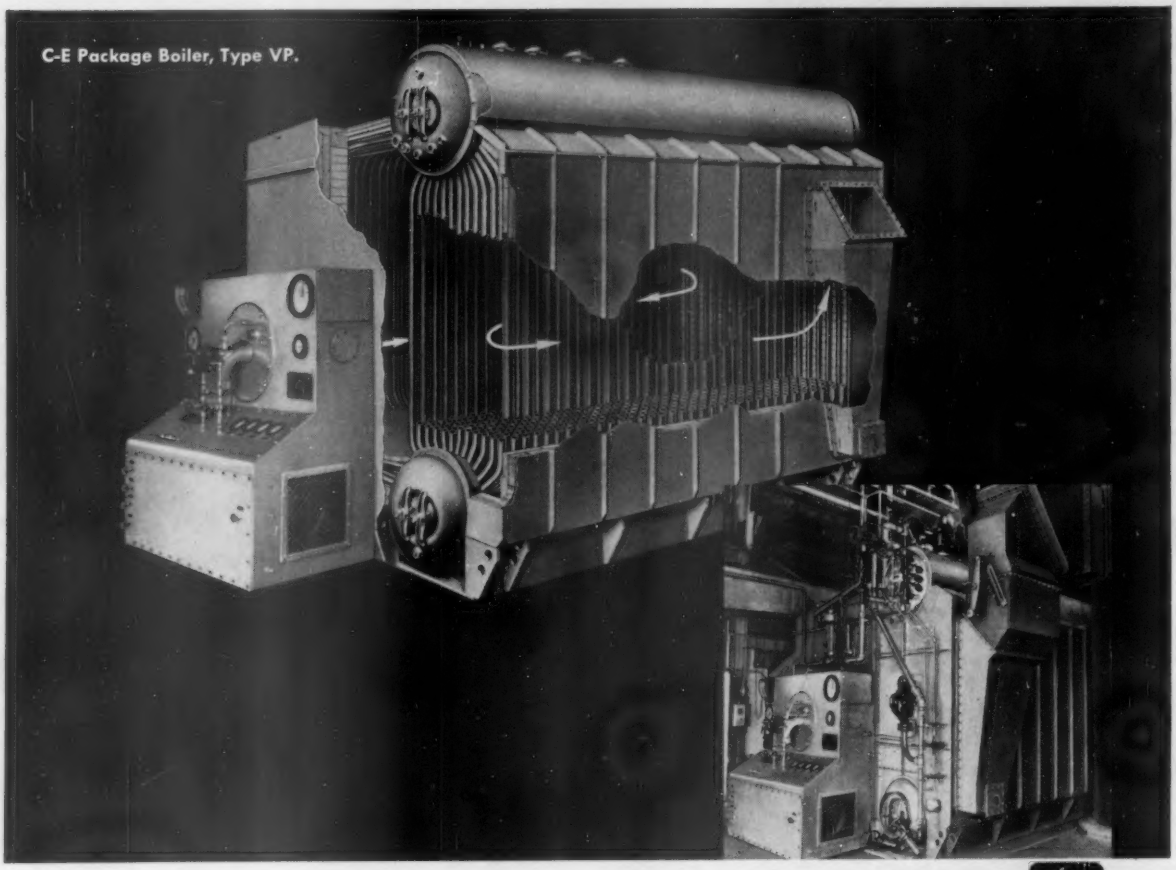
That's why VP purchasers range from small companies to some of the nation's largest – plus schools, institutions, government agencies, including the Atomic Energy Commission. These users employ VP Boilers for all types of applications – heating, process, even power generation.

SPECIFICATIONS OF THE VP BOILER

Capacity — 4,000 to 40,000 pounds of steam per hour
Pressures — up to 500 pounds per square inch
Fuel — oil or gas
Erection — completely shop-assembled
Foundation — simple concrete slab

Have full details on the VP next time you are in the market for a boiler of moderate capacity. Get the new Catalog VP-267, which contains specifications, and information on dimensions, construction details and controls. B-845B

	BOILER A		B		C	
	Yes	No	Yes	No	Yes	No
Will your boiler be a real "package" type with control panel and all controls mounted integral with the boiler?						
Will your package boiler be equipped with drum internals to assure dry steam?						
Will its "steam quality" be backed with a guarantee?						
Will your boiler have a 30-in. lower drum to provide convenient accessibility?						
Will yours be a one-burner boiler, with a simple wiring and control system?						
Will your boiler have the largest load swing range available?						
Will your boiler be equipped with a quiet centrifugal fan?						
Will your furnace be *completely* water-cooled?						
Will your furnace have the highest ratio of water cooled surface to furnace volume?						



C-E Package Boiler, Type VP.

COMBUSTION ENGINEERING

Combustion Engineering Building • 200 Madison Avenue, New York 16, N. Y.

BOILERS, FUEL BURNING & RELATED EQUIPMENT; PULVERIZERS, AIR SEPARATORS AND FLASH DRYING SYSTEMS; PRESSURE VESSELS; AUTOMATIC WATER HEATERS; SOIL PIPE

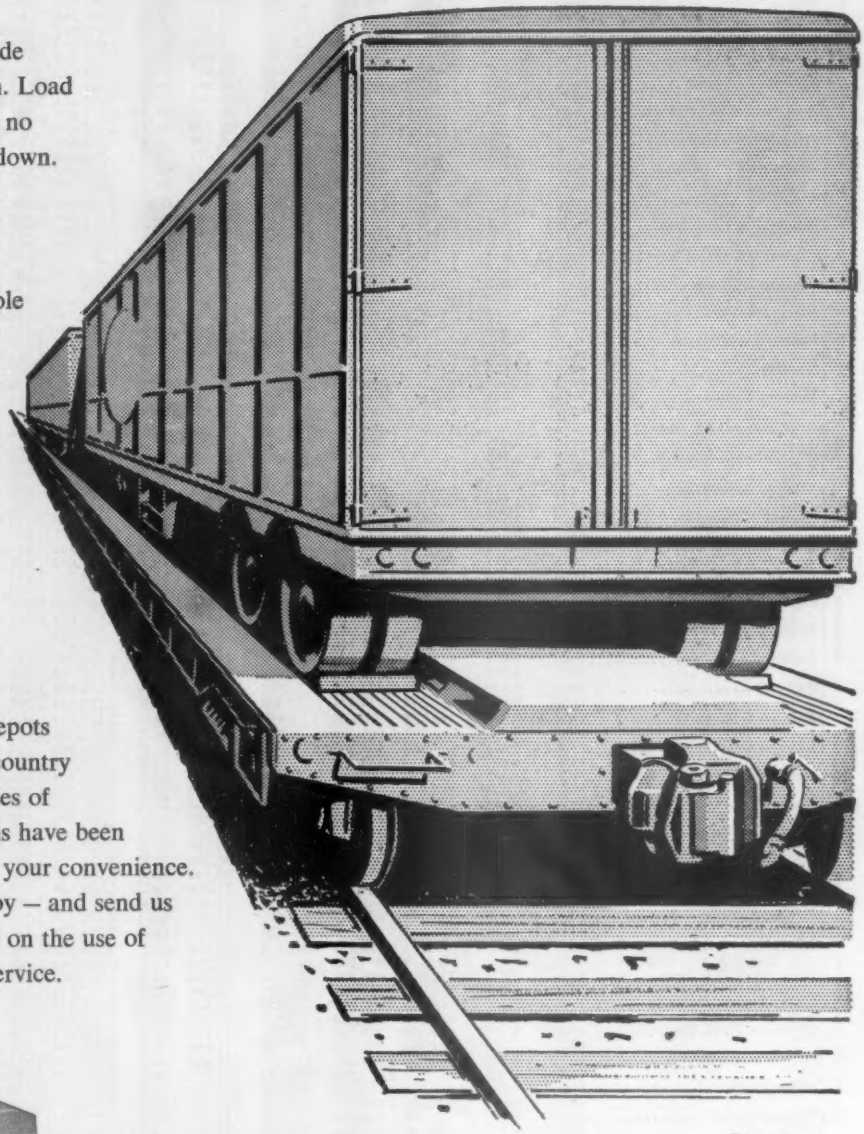
Pureco "DRY-ICE" gives you "cold" protection

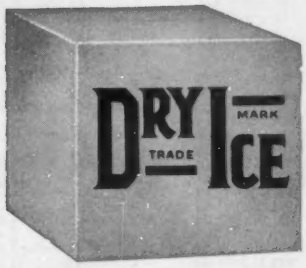
. . . saves enroute inspection!

"DRY-ICE" needs no outside power supply or supervision. Load it – and forget it. There are no mechanical parts to break down. It's unaffected by vibration.

Use "DRY-ICE" in both stationary bunkers or portable units. In tests "DRY-ICE" has produced exactly *controlled* temperatures from ten below zero to 60 degrees F. Its reliable cold protects perishables with maximum efficiency, minimum cost per mile.

A network of 100 Pureco depots are located throughout the country to assure you of fast deliveries of "DRY-ICE". These locations have been listed in a handy booklet for your convenience. Write or call us for your copy – and send us any questions you may have on the use of "DRY-ICE" in Piggyback service.





AT THE FRONTIERS OF PROGRESS YOU'LL FIND . . .

Pure Carbonic Company

NATIONWIDE "DRY-ICE" SERVICE-DISTRIBUTING STATIONS IN PRINCIPAL CITIES

GENERAL OFFICES: 150 EAST 42ND STREET, NEW YORK 17, NEW YORK

PURE CARBONIC COMPANY is a division of **AIR REDUCTION COMPANY, INCORPORATED** • Principal products of other divisions include: **AIRCO** — industrial gases, welding and cutting equipment and acetylenic chemicals • **OHIO** — medical gases and hospital equipment • **NATIONAL CARBIDE** — pipeline acetylene and calcium carbide • **COLTON** — polyvinyl acetates, alcohols and other synthetic resins.

Freight Operating Statistics of Large Railways—Selected Items

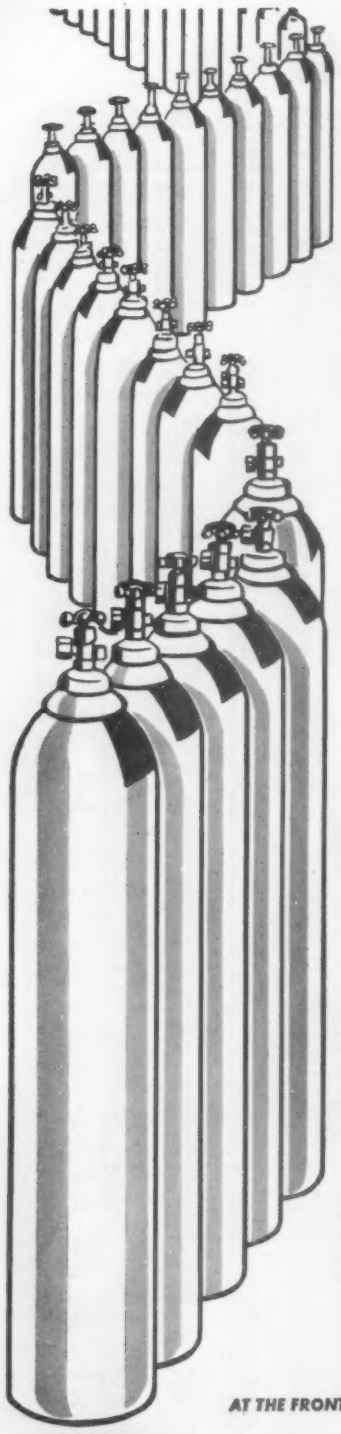
Region	Road and Year	Miles of road operated	Locomotive Miles: Train miles	Locomotive Miles: Principal and helper	Locomotive Miles: Light	Car Miles: Loaded (thousands)	Car Miles: Per cent loaded	Ton-miles (thousands): Gross excl.locos. & tenders	Ton-miles (thousands): Net rev. and non-rev.	Road-locos.on lines: Serviceable: Unstored	Road-locos.on lines: Serviceable: Stored	Road-locos.on lines: B.O.	Road-locos.on lines: Per cent B.O.
New Eng. Region	Boston & Maine 1956	1,562	242,246	247,804	9,930	9,265	66.8	606,209	253,053	70	..	1	1.4
	1955	1,564	247,572	252,771	9,335	9,829	68.5	614,421	252,054	66	1	5	6.9
	N. Y., N. H. & Htfd 1956	1,746	270,144	270,144	22,393	11,848	66.6	762,722	314,621	83	..	8	8.8
	1955	1,746	292,461	292,485	20,548	12,865	70.8	766,383	315,322	93	..	6	6.1
Great Lakes Region	Delaware & Hudson 1956	792	177,719	182,501	6,072	9,428	71.5	645,061	340,081	42	1	1	2.3
	1955	792	180,415	185,350	5,600	9,603	71.7	639,606	332,432	38	..	3	7.3
	Del., Lack. & Western 1956	962	306,704	319,759	26,316	12,816	68.9	849,960	377,625	62	..	1	1.6
	1955	962	281,598	294,415	21,604	12,386	69.8	793,388	345,148	62	..	1	1.6
	Erie 1956	2,225	592,455	599,298	19,277	32,969	68.9	2,061,685	825,622	168	..	3	1.8
	1955	2,224	588,389	595,098	17,301	32,258	68.5	2,000,704	780,775	163	..	1	.6
	Grand Trunk Western 1956	951	277,267	281,259	1,873	8,585	58.7	625,235	249,654	56	1	16	21.9
	1955	952	248,934	255,519	2,124	8,623	60.2	606,290	234,991	57	3	19	24.1
	Lehigh Valley 1956	1,135	230,444	233,594	6,661	10,508	65.4	745,258	353,010	34	..	1	2.9
	1955	1,142	218,562	221,599	7,880	10,847	67.8	739,962	348,747	34	..	1	2.9
	New York Central 1956	10,565	2,450,679	2,494,165	109,166	100,001	60.9	7,259,983	3,257,571	562	6	73	11.4
	1955	10,661	2,576,555	2,619,654	97,474	103,553	61.8	7,427,665	3,345,321	590	41	99	13.6
	New York, Chic. & St. L. 1956	2,154	763,211	785,274	8,076	31,375	65.1	2,277,609	1,031,183	178	..	23	11.4
	1955	2,154	745,050	776,581	7,578	31,070	66.4	2,146,218	970,074	161	15	30	14.6
	Pitts. & Lake Erie 1956	221	71,242	71,242	....	3,099	68.3	262,659	163,211	16	..	..	..
	1955	221	66,701	66,829	....	3,079	71.0	266,418	171,139	14	7	..	..
	Wabash 1956	2,381	510,728	512,783	5,556	23,335	65.6	1,541,803	602,929	111	..	1	.9
	1955	2,381	545,238	546,176	5,971	24,677	66.2	1,582,409	600,438	102	..	1	1.0
Central Eastern Region	Baltimore & Ohio 1956	5,910	1,633,538	1,838,994	177,470	65,741	63.7	5,380,682	2,691,110	471	2	64	11.9
	1955	6,072	1,587,451	1,752,184	168,679	65,339	63.6	5,079,600	2,498,321	446	10	100	18.0
	Bessemer & Lake Erie 1956	208	66,707	71,178	196	3,517	57.5	426,542	272,032	18	..	..	..
	1955	208	59,984	65,003	230	3,293	57.2	405,856	260,455	17	..	..	..
	Central RR Co. of New Jersey 1956	612	133,978	134,872	6,166	5,096	66.4	387,572	207,305	67	..	..	..
	1955	613	123,648	124,462	5,568	4,906	66.7	362,909	189,483	62	..	6	8.8
	Chicago & Eastern Ill. 1956	868	116,031	116,031	2,132	5,036	67.6	356,993	175,103	28	..	2	6.7
	1955	868	117,170	117,170	2,491	5,308	69.4	367,668	188,376	27	..	3	10.0
	Elgin, Joliet & Eastern 1956	236	91,870	92,253	....	2,550	61.0	232,549	126,505	39	..	1	2.5
	1955	236	84,927	85,814	....	2,767	63.5	224,110	121,198	36	3	2	4.9
	Pennsylvania System 1956	9,892	3,058,119	3,276,581	246,324	134,931	66.7	9,823,218	4,797,285	857	..	342	28.5
	1955	9,892	3,007,957	3,231,891	247,745	131,184	65.4	9,516,722	4,551,720	838	40	448	33.8
	Reading 1956	1,303	333,808	335,927	11,193	13,534	66.3	1,079,771	592,766	159	2	23	12.5
	1955	1,303	323,782	328,570	11,113	12,392	65.1	977,374	519,231	158	3	28	14.8
	Western Maryland 1956	846	158,520	164,719	9,389	6,351	66.2	523,582	301,976	43	..	..	..
	1955	846	159,376	165,308	8,895	6,122	63.2	510,800	286,904	37	..	..	..
Pocahontas Region	Chesapeake & Ohio 1956	5,067	1,582,929	1,608,121	48,462	71,343	57.5	6,307,054	3,570,487	487	42	67	11.2
	1955	5,046	1,494,045	1,517,529	44,291	66,487	57.6	5,738,668	3,232,471	385	19	184	31.3
	Norfolk & Western 1956	2,110	757,170	807,956	60,695	37,229	59.4	3,501,039	1,950,438	224	6	16	6.5
	1955	2,104	676,476	720,727	55,137	33,584	58.8	3,101,170	1,692,238	222	24	22	8.2
Southern Region	Atlantic Coast Line 1956	5,278	870,506	870,524	10,185	26,196	59.8	1,898,603	828,002	196	..	6	3.0
	1955	5,278	846,460	846,460	9,054	25,868	59.0	1,819,359	785,568	234	..	7	2.9
	Central of Georgia 1956	1,731	214,442	214,442	2,273	8,148	68.3	570,112	276,830	73	..	3	3.9
	1955	1,731	192,755	192,780	1,719	7,636	69.2	523,461	256,191	77	..	2	2.5
	Gulf, Mobile & Ohio 1956	2,717	268,052	268,052	303	14,649	69.8	973,932	461,943	85	..	6	6.6
	1955	2,717	262,369	262,369	127	14,573	70.7	967,615	458,879	87	..	2	2.2
	Illinois Central 1956	6,532	1,176,537	1,176,665	33,719	48,500	63.2	3,534,944	1,660,291	323	5	127	27.9
	1955	6,531	1,199,906	1,202,651	35,806	50,205	63.2	3,606,805	1,660,729	345	52	169	29.5
	Louisville & Nashville 1956	4,714	882,064	887,678	16,363	33,096	63.0	2,500,889	1,284,798	187	16	25	11.0
	1955	4,715	899,320	905,676	17,306	34,813	62.6	2,659,220	1,367,585	181	27	21	9.2
	Nash., Chatt. & St. Louis 1956	1,043	167,606	171,251	3,813	5,509	71.8	357,736	170,462	49	..	4	7.5
	1955	1,043	161,991	165,456	3,758	5,397	70.9	354,671	167,979	51	..	2	3.8
	Seaboard Air Line 1956	4,051	673,726	673,726	2,267	25,377	63.6	1,791,784	788,753	138	..	8	5.5
	1955	4,053	624,994	624,994	2,188	24,060	62.8	1,696,724	725,418	136	..	12	8.1
	Southern 1956	6,259	882,581	882,651	11,997	40,519	67.5	2,670,045	1,238,971	183	..	10	5.2
	1955	6,264	913,761	913,831	13,247	41,499	67.2	2,710,154	1,237,186	272	..	3	1.1
Northwestern Region	Chicago & North Western 1956	7,810	712,772	713,606	8,292	29,822	63.5	2,184,713	894,660	141	..	6	4.1
	1955	7,848	722,497	723,595	9,516	32,115	66.7	2,215,549	1,011,623	139	13	43	22.1
	Chicago Great Western 1956	1,437	131,608	131,608	179	7,233	66.6	496,049	224,403	32	..	..	..
	1955	1,437	134,335	134,335	190	7,777	69.0	504,974	223,663	29	..	4	12.1
	Chic., Milw., St. P. & Pac. 1956	10,633	952,250	967,954	17,090	42,280	64.8	2,932,424	1,325,042	277	3	13	4.4
	1955	10,633	981,648	999,642	19,097	43,029	65.1	2,955,658	1,328,339	265	48	20	6.0
	Chic., St. P., Minn. & Omaha 1956	1,606	154,792	154,792	2,894	5,145	65.4	367,819	168,297	42	..	3	6.7
	1955	1,606	159,210	160,303	4,018	5,380	67.7	369,490	162,399	59	..	15	20.3
	Duluth, Missabe & Iron Range 1956	569	162,720	163,311	988	8,127	51.0	826,148	507,498	70	2	5	6.5
	1955	569	174,525	175,477	1,737	8,199	51.9	878,317	534,843	61	2	4	6.0
	Great Northern 1956	8,274	1,200,815	1,209,081	38,015	48,304	62.8	3,777,721	1,885,026	275	43	21	6.2
	1955	8,270	1,171,836	1,178,335	38,629	49,133	65.8	3,675,965	1,840,979	245	111	45	11.2
	Minneap., St. P. & S. Ste. M. 1956	4,171	407,268	409,309	2,041	14,650	64.2	1,024,189	477,512	88	10	3	3.0
	1955	4,171	415,992	418,176	2,522	14,469	68.1	977,217	469,408	79	11	5	5.3
	Northern Pacific 1956	6,569	844,367	857,817	22,006	35,371	65.0	2,472,425	1,110,958	225	66	36	11.0
	1955	6,570	826,791	846,949	21,158	35,313	68.4	2,394,159	1,111,279	300	28	56	14.6
Central Western Region	Atch., Top. & S. Fe (incl. G. C. & S. F. and P. & S. F.) 1956	13,124	2,610,094	2,710,473	91,875	123,515	64.2	8,548,228	3,068,786	570	44	46	7.0
	1955	13,098	2,726,449	2,859,050	90,573	126,266	63.9	8,610,641	3,089,520	590	12	40	6.2
	Chic., Burl. & Quincy 1956	8,771	1,031,069	1,027,308	23,164	46,958	69.0	3,092,803	1,380,228	203	46	39	13.5
	1955	8,773	1,063,312	1,059,691	33,303	46,596	70.2	2,977,834	1,340,263	204	61	27	9.2
	Chic., Rock I. & Pac. 1956	7,580	1,025,366	1,020,650	1,880	40,470	61.4	2,951,546	1,206,070	170	..	5	2.9
	1955	7,904	933,675	930,739	1,649	37,024	60.5	2,712,642	1,094,311	172	..	3	1.7
	Denver & R. G. Wn. 1956	2,155	310,330	338,161	34,850	15,185	70.7	1,043,911	500,407	77	7	12	12.5
	1955	2,165	304,606	326,733	27,831	15,098	71.8	1,023,206	494,080	66	38	17	14.0
	Southern Pacific 1956	8,055	2,400,668	2,503,426	171,697	111,630	63.1	7,713,696	3,013,804	722	35	61	7.5
	1955	8,068	2,553,097	2,672,810	276,066	115,577	62.3	8,074,633	3,108,026	749	5	66	8.0
	Union Pacific 1956	9,799	2,210,452	2,271,802	105,026	103,353	65.6	6,950,597	2,903,479	377	93	104	18.1
	1955	9,813	2,245,386	2,297,570	107,507	107,294	68.4	6,953,207	2,974,686	430	132	116	17.1
	Western Pacific 1956	1,190	252,328	266,665	13,065	11,732	69.3	778,507	346,078	47	..	..	..
	1955	1,190	246,646	257,968	17,353	11,575	71.8	734,882	324,323	40	..	..	..
Southwestern Region	Kansas City Southern 1956	886	150,533	150,583	259	8,748	69.3	624,829	292,551	25	..	1	3.8
	1955	886	145,750	145,750	446	8,398	68.3	583,708	270,569	26	..	2	7.1
	Louisiana & Arkansas 1956	746	95,158	95,158	....	4,247	65.9	323,625	152,952	19	..	..	..
	1955	753	96,859	96,859	60	4,175	64.8	310,809	146,899	16	..	..	..
	Mo.-Kans.-Texas Lines 1956	3,230	341,865	341,865	3,592	14,003	63.1	960,323	417,832	88	..	..	..
	1955	3,230	331,362	331,362	3,681	14,383	65.2	943,176	416,266	85	..	..	..
	Missouri Pacific 1956	9,701	1,278,529	1,278,529	10,907	55,185	65.6	3,876,607	1,770,167	352	..	37	9.5
	1955	9,702	1,332,900	1,332,900	10,947	58,318	65.9	4,032,398	1,801,508	337	48	79	17.0
	Texas & Pacific 1956	1,822	307,167	307,167	3,502	14,763	61.8	1,073,450	400,206	62	..	..	..
	1955	1,822	330,426	330,426	4,265	15,022	61.4	1,082,533	397,059	62	..	2	3.1
	St. Louis-San Francisco 1956	4,573	620,708	620,708	5,849	23,955	68.1	1,597,496	734,398	106	..	7	6.2
	1955	4,573	580,305	580,305	5,585	23,572	68.2	1,528,955	681,828	130	..	7	5.1
	St. Louis Southw. Lines 1956	1,554	327,851	327,879	1,580	15,701	70.4	997,594	445,938	55	..	1	1.8
	1955	1,554	310,141	310,153	1,584	14,791	68.8	967,353	432,421	58	1	11	15.7
	Texas & New Orleans 1956	4,302	697,695	697,695	422	28,152	64.5	1,962,560	855,610	145	..	2	1.4
	1955	4,302	755,612	755,612	2,985	29,115	60.9	2,089,097	878,178	149	..	3	2.1

For the Month of June 1956 Compared with June 1955

	Region, Road and Year		Freight cars on line				G.t.m.per train-hr. excl.locos and tenders	G.t.m. per train-mi. excl.locos and tenders	Net ton-mi. per train-mile	Net ton-mi. per l'd car-mile	Net ton-mi. per car-day	Car-miles per car-day	Net daily ton-mi. per road-mi.	Train-miles per train-hour	Miles per loco. per day
			Home	Foreign	Total	Per Cent B.O.									
New Eng. Region	Boston & Maine	1956	1,600	8,347	9,947	1.7	37,425	2,507	1,047	27.3	841	46.1	5,400	15.0	137.6
		1955	2,256	9,882	12,138	3.3	37,195	2,490	1,022	25.6	721	41.0	5,372	15.0	135.0
	N. Y., N. H. & Htfd	1956	1,997	16,213	18,210	2.5	43,255	2,823	1,165	26.6	573	32.4	6,007	15.3	128.0
		1955	1,946	20,628	22,574	1.5	41,783	2,520	1,078	24.5	520	30.0	6,020	15.9	139.0
Great Lakes Region	Delaware & Hudson	1956	1,425	6,076	7,501	4.6	63,359	3,647	1,923	36.1	1,509	58.5	14,313	17.5	161.1
		1955	2,998	5,688	8,686	3.6	64,340	3,562	1,851	34.6	1,285	51.8	13,991	18.1	172.8
	Del., Lack. & Western	1956	3,164	11,964	15,128	2.5	48,789	2,817	1,252	29.5	824	40.6	13,085	17.6	202.7
		1955	4,912	9,969	14,881	2.8	48,809	2,875	1,251	27.9	771	39.6	11,959	17.3	186.7
	Erie	1956	5,060	21,103	26,163	2.9	65,757	3,514	1,407	25.0	1,062	61.6	12,369	18.9	137.1
		1955	7,834	17,771	25,605	3.7	65,021	3,434	1,340	24.2	1,013	61.1	11,702	19.1	140.5
	Grand Trunk Western	1956	4,054	8,379	12,433	8.9	49,713	2,275	909	29.1	654	38.3	8,751	22.0	137.7
		1955	3,986	9,719	13,705	9.7	51,895	2,468	957	27.3	571	34.8	8,228	21.3	116.8
	Lehigh Valley	1956	6,663	7,682	14,345	4.3	67,757	3,299	1,563	33.6	777	35.4	10,367	21.0	249.1
		1955	8,531	8,276	16,807	3.5	69,742	3,449	1,626	32.2	688	31.6	10,182	20.6	240.1
	New York Central	1956	49,543	93,715	143,258	3.0	50,517	3,012	1,352	32.6	757	38.2	10,278	17.1	151.2
		1955	56,246	93,250	149,496	5.2	50,445	2,927	1,318	32.3	736	36.9	10,460	17.5	141.7
	New York, Chic. & St. L.	1956	6,581	19,318	25,899	5.3	51,247	3,065	1,388	32.9	1,325	61.9	15,958	17.2	145.8
		1955	6,498	18,007	24,505	7.3	51,648	2,951	1,334	31.2	1,369	66.0	15,012	17.9	138.7
	Pitts. & Lake Erie	1956	2,630	9,536	12,166	3.7	56,595	3,727	2,316	52.7	439	12.2	24,617	15.4	161.6
		1955	3,159	8,587	11,746	4.2	61,814	4,032	2,590	55.6	499	12.6	25,813	15.5	116.9
	Wabash	1956	8,984	10,070	19,054	5.1	65,478	3,036	1,187	25.8	1,062	62.6	8,441	21.7	162.3
		1955	8,069	10,472	18,541	6.5	63,241	2,917	1,107	24.3	1,075	66.7	8,406	21.8	189.5
Central Eastern Region	Baltimore & Ohio	1956	48,082	54,003	102,085	4.0	49,983	3,357	1,679	40.9	885	34.0	15,178	15.2	133.5
		1955	45,935	44,785	90,720	12.9	49,726	3,251	1,599	38.2	879	36.1	13,715	15.5	122.5
	Bessemer & Lake Erie	1956	5,103	1,290	6,393	4.7	104,009	6,715	4,283	77.3	1,516	34.1	43,595	16.3	149.4
		1955	4,435	1,793	6,228	10.0	105,417	6,942	4,455	79.1	1,552	34.3	41,740	15.6	138.6
	Central RR Co. of New Jersey	1956	2,135	10,637	12,772	7.0	41,209	3,025	1,618	40.7	531	19.7	11,291	14.2	96.2
		1955	3,351	10,452	13,803	6.6	42,396	3,050	1,593	38.6	451	17.5	10,304	14.4	90.4
	Chicago & Eastern Ill.	1956	2,469	4,036	6,505	6.5	53,251	3,087	1,514	34.8	996	42.4	6,724	17.3	138.6
		1955	2,566	3,942	6,508	4.7	50,881	3,146	1,612	35.5	997	40.5	7,234	16.2	142.9
	Elgin, Joliet & Eastern	1956	6,412	10,246	16,658	4.7	19,788	2,655	1,444	49.6	250	8.2	17,868	7.8	101.7
		1955	7,015	9,368	16,383	5.3	21,634	2,760	1,493	43.8	248	8.9	17,118	8.2	92.1
	Pennsylvania System	1956	94,086	99,205	193,291	5.5	54,111	3,312	1,617	35.6	823	34.7	16,166	16.8	106.8
		1955	108,851	95,206	204,057	13.3	54,099	3,256	1,557	34.7	740	32.6	15,338	17.1	95.9
	Reading	1956	9,371	21,148	30,519	3.5	49,215	3,235	1,776	43.8	646	22.3	15,164	15.2	74.6
		1955	12,759	16,300	29,059	5.8	46,383	3,019	1,604	41.9	588	21.5	13,283	15.4	73.4
	Western Maryland	1956	4,362	4,101	8,463	3.6	47,768	3,363	1,940	47.5	1,180	37.5	11,898	14.5	155.8
		1955	4,318	3,283	7,601	4.5	47,057	3,251	1,826	46.9	1,219	41.1	11,304	14.7	173.4
Pocahontas Region	Chesapeake & Ohio	1956	49,249	37,103	86,352	1.0	74,441	4,013	2,272	50.0	1,400	48.7	23,489	18.7	103.5
		1955	50,225	36,527	86,752	2.2	72,131	3,867	2,178	48.6	1,258	44.9	21,353	18.8	95.5
	Norfolk & Western	1956	32,112	10,063	42,175	1.0	80,975	4,760	2,652	52.4	1,540	49.5	30,813	17.5	127.2
		1955	32,876	8,423	41,299	1.8	80,279	4,712	2,571	50.4	1,408	47.5	26,810	17.5	105.5
Southern Region	Atlantic Coast Line	1956	16,884	16,101	32,985	4.8	42,264	2,192	956	31.6	811	42.9	5,229	19.4	156.4
		1955	18,232	13,961	32,193	4.3	40,401	2,162	933	30.4	759	42.4	4,961	18.8	129.4
	Central of Georgia	1956	2,231	6,794	9,025	3.9	47,501	2,665	1,294	34.0	996	43.0	5,331	17.9	101.4
		1955	2,833	6,178	9,011	4.3	47,914	2,724	1,333	33.6	925	39.8	4,933	17.6	92.6
	Gulf, Mobile & Ohio	1956	4,402	10,796	15,198	5.8	70,188	3,637	1,725	31.5	1,021	46.4	5,667	19.3	106.8
		1955	4,910	9,528	14,438	3.1	71,232	3,691	1,750	31.5	1,061	47.7	5,630	19.3	107.2
	Illinois Central	1956	24,598	27,071	51,669	1.6	52,954	3,046	1,430	34.2	1,089	50.4	8,473	17.6	95.7
		1955	25,379	25,388	50,767	2.3	51,153	3,047	1,403	33.1	1,090	52.2	8,476	17.0	79.0
	Louisville & Nashville	1956	23,654	14,510	38,164	4.0	49,578	2,842	1,460	38.8	1,060	43.3	9,085	17.5	144.7
		1955	28,392	14,860	43,252	5.1	50,040	2,965	1,525	39.3	1,062	43.2	9,668	16.9	144.7
	Nash., Chatt. & St. Louis	1956	3,383	3,910	7,293	4.7	41,723	2,137	1,018	30.9	780	35.1	5,448	19.5	121.6
		1955	3,927	3,358	7,285	4.6	41,918	2,194	1,039	31.1	789	35.8	5,368	19.1	114.3
	Seaboard Air Line	1956	10,307	13,601	23,908	2.0	49,988	2,719	1,197	31.1	1,015	51.4	6,490	18.8	176.9
		1955	12,006	13,270	25,276	2.8	51,179	2,757	1,179	30.2	904	47.8	5,966	18.9	165.7
	Southern	1956	15,403	23,093	38,496	3.0	52,441	3,035	1,408	30.6	1,036	50.2	6,598	17.3	135.4
		1955	17,301	23,025	40,326	3.9	51,284	2,977	1,359	29.8	1,029	51.4	6,584	17.3	121.9
Northwestern Region	Chicago & North Western	1956	16,785	28,640	45,425	4.5	53,156	3,107	1,273	30.0	652	34.2	3,818	17.3	161.8
		1955	17,397	30,407	47,804	4.5	54,896	3,120	1,424	31.5	711	33.8	4,297	17.9	137.9
	Chicago Great Western	1956	1,509	4,170	5,679	3.0	72,079	3,775	1,708	31.0	1,355	65.6	5,205	19.1	143.5
		1955	1,288	4,893	6,181	3.1	72,016	3,766	1,668	28.8	1,179	59.4	5,188	19.2	141.8
	Chic., Milw., St. P. & Pac.	1956	28,794	34,023	62,817	6.9	58,681	3,091	1,397	31.3	712	35.0	4,154	19.1	119.6
		1955	30,380	31,769	62,149	6.2	56,387	3,021	1,358	30.9	706	35.1	4,164	18.7	109.9
	Chic., St. P., Minn. & Omaha	1956	1,056	8,146	9,202	1.7	33,668	2,388	1,093	32.7	614	28.7	3,493	14.2	97.4
		1955	1,198	8,536	9,734	4.4	32,695	2,338	1,028	30.2	583	28.5	3,371	14.1	82.5
	Duluth, Missabe & Iron Range	1956	13,654	766	14,420	1.8	90,487	5,417	3,328	62.4	1,156	36.3	29,730	17.8	85.1
		1955	13,663	901	14,564	1.6	87,508	5,395	3,286	65.2	1,224	36.2	31,332	17.4	103.1
	Great Northern	1956	21,013	27,135	48,148	2.7	56,619	3,205	1,599	39.0	1,371	56.0	7,594	18.0	132.0
		1955	20,788	20,934	41,722	3.2	57,295	3,185	1,595	37.5	1,507	61.1	7,420	18.3	108.1
	Minneap., St. P. & S. Ste. M.	1956	6,641	9,384	16,025	4.0	52,042	2,528	1,179	32.6	1,019	48.6	3,816	20.7	155.7
		1955	7,058	8,322	15,380	7.2	53,003	2,381	1,144	32.4	1,050	47.5	3,751	22.6	157.8
	Northern Pacific	1956	17,645	18,572	36,217	6.0	56,403	2,936	1,319	31.4	1,035	50.7	5,637	19.3	97.0
		1955	18,177	18,708	36,885	5.3	54,580	2,910	1,351	31.5	1,021	47.5	5,638	18.8	84.2
Central Western Region	Atch., Top. & S. Fe (incl. G. C. & S. F. and P. & S. F.)	1956	57,030	40,662	97,692	3.1	72,257	3,251	1,179	24.8	1,072	67.2	7,794	22.3	149.5
		1955	55,418	38,837	94,255	3.6	70,230	3,174	1,139	24.5	1,122	71.7	7,863	22.2	164.1
	Chic., Burl. & Quincy	1956	18,363	24,143	42,506	3.8	62,330	3,005	1,341	29.4	1,100	54.3	5,245	20.8	130.9
		1955	20,635	22,730	43,365	3.4	57,301	2,806	1,263	28.8	1,027	50.8	5,092	20.5	132.1
	Chic., Rock I. & Pac.	1956	12,077	24,068	36,145	5.3	56,435	2,888	1,180	29.8	1,147	62.7	5,304	19.6	203.5
		1955	12,721	21,494	34,215	4.4	56,636	2,914	1,176	29.6	1,088	60.8	4,615	19.5	187.1
	Denver & R. G. Wn.	1956	7,698	6,281	13,979	3.8	63,417	3,370	1,616	33.0	1,219	52.3	7,740	18.9	138.1
		1955	8,167	5,105	13,272	4.2	64,850	3,366	1,625	32.7	1,222	52.0	7,607	19.3	103.5
	Southern Pacific	1956	30,630	51,602	82,232	1.7	62,082	3,251	1,270	27.0	1,234	72.5	12,472	19.3	116.7
		1955	29,385	48,633	78,018	1.6	57,876	3,200	1,232	26.9	1,366	81.4	12,841	18.3	131.6
	Union Pacific	1956	31,099	33,168	64,267	1.5	80,812	3,168	1,323	28.1	1,546	83.9	9,877	25.7	137.4
		1955	29,491	35,294	64,785	2.4	78,634	3,116	1,333	27.7	1,548	81.6	10,105	25.4	119.4
	Western Pacific	1956	2,158	5,335	7,493	1.5	76,587	3,101	1,379	29.5	1,612	78.9	9,694	24.8	209.9
		1955	2,425	4,891	7,316	1.6	72,602	2,994	1,321	28.0	1,604	79.7	9,085	24.4	237.9
Southwestern Region	Kansas City Southern	1956	1,205	6,192	7,397	2.5	84,107	4,163	1,949	33.4	1,330	57.4	11,006	20.3	226.0
		1955	1,067	6,116	7,183	2.7	84,168	4,012	1,860	32.2	1,266	57.6	10,179	21.0	198.2
	Louisiana & Arkansas	1956	1,570	3,534	5,104	5.6	65,871	3,405	1,609	36.0	1,015	42.8	6,834	19.4	214.3
		1955	1,182	3,217	4,399	5.8	53,755	3,217	1,521	35.2	1,083	47.5	6,503	16.8	240.8
	Mo.-Kans.-Texas Lines	1956	3,743	8,496	12,239	5.4	57,316	2,816	1,225	29.8	1,170	62.2	4,312	20.4	140.0
		1955	4,516	8,057	12,573	9.1	56,695	2,853	1,259	28.9	1,140	60.4	4,296	19.9	134.3
	Missouri Pacific	1956	22,354	34,463	56,817	4.3	60,665	3,047	1,391	32.1	1,062	50.4	6,082	20.0	119.2
		1955	25,186	28,524	53,710	2.5	64,218	3,046	1,361	30.9	1,114	54.7	6,189	21.2	103.9
	Texas & Pacific	1956	2,355	7,145	9,500	2.2	77,910	3,511	1,309	27.1	1,452	86.6	7,322	22.3	179.3
		1955	2,832	7,139	9,971	2.6	73,994	3,285	1,205	26.4	1,350	83.1	7,264	22.6	189.5
	St. Louis-San Francisco	1956	11,892	12,281	24,273	3.2	50,642	2,584	1,188	30.7	1,009	48.3	5,353	19.7	205.6
		1955	11,691	11,140	22,831	3.8	50,757	2,642	1,178	28.9	970	49.2	4,970	19.3	160.5
	St. Louis Southw. Lines	1956	2,068	5,706	7,774	1.2	56,986	3,048	1,362	28.4	2,095	104.8	9,565	18.7	210.6
		1955	1,727	5,022	6,749	1.6	61,970	3,123	1,396	29.2	2,203	109.5	9,275	19.9	159.9
	Texas & New Orleans	1956	4,884	15,185	20,069	2.4	57,641	2,829	1,235	30.4	1,374	70.0	6,637	20.5	165.9
		1955	5,547	17,786	23,333	2.0	57,156	2,782	1,169	30.2	1,241	67.6	6,804	20.7	182.8

Compiled by the Bureau of Transport Economics and Statistics, Interstate Commerce Commission. Subject to revision.

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Railway Officers

BALTIMORE & OHIO.—Joseph L. Stanton, director of public relations, has resigned to accept a position as executive director of the Maryland Port Authority at Baltimore.

CANADIAN PACIFIC. — J. G. Sutherland, assistant engineer of buildings at Montreal, named engineer of buildings there, succeeding **L. H. Laffoley,** appointed engineer of hotels. Mr. Laffoley will be responsible for construction of the new 17-story, 400-room addition to the Royal York Hotel in Toronto. **G. A. Morison,** assistant engineer, appointed assistant engineer of buildings, Montreal.

GREAT NORTHERN. — P. G. Pagel appointed auditor data processing and **George Waskey** named assistant auditor data processing. **H. E. Jackson, H. S. Hazen, R. E. Griffin** and **A. F. Reber** appointed assistant auditors, Reproduction, Tabulating, Univac and Statistical divisions, respectively.

R. N. Whitman, who resigned August 15 as general manager of the **Alaska,** appointed assistant general manager of GN's Lines East at Duluth. Prior to his appointment to the Alaska he served as superintendent of the GN's Cascade division at Seattle.

E. M. Pulsipher, assistant general storekeeper, named general storekeeper, St. Paul.

ILLINOIS TERMINAL. — Aubrey E. Anderson elected secretary



Aubrey E. Anderson

and comptroller, succeeding **J. Frank Cress,** vice-president, secretary and controller, retired.

OBITUARY

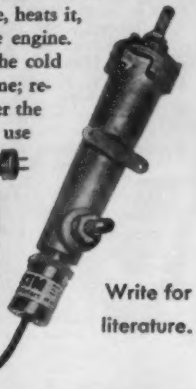
Thurlow H. Kelch, 72, retired assistant general passenger agent of the **Chicago & Eastern Illinois,** died September 7.

Philip C. Reed, 72, retired perishable traffic manager of the **Pennsylvania,** died September 4.

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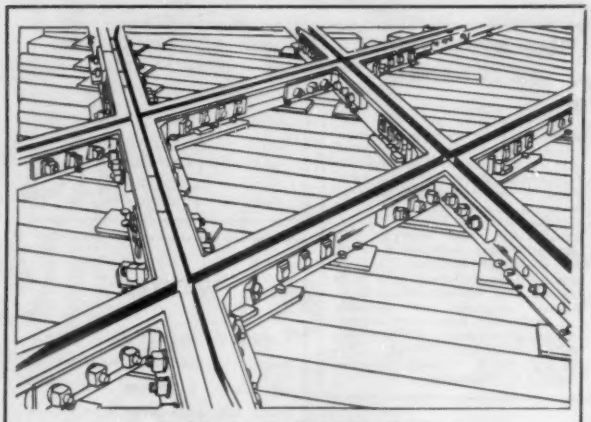
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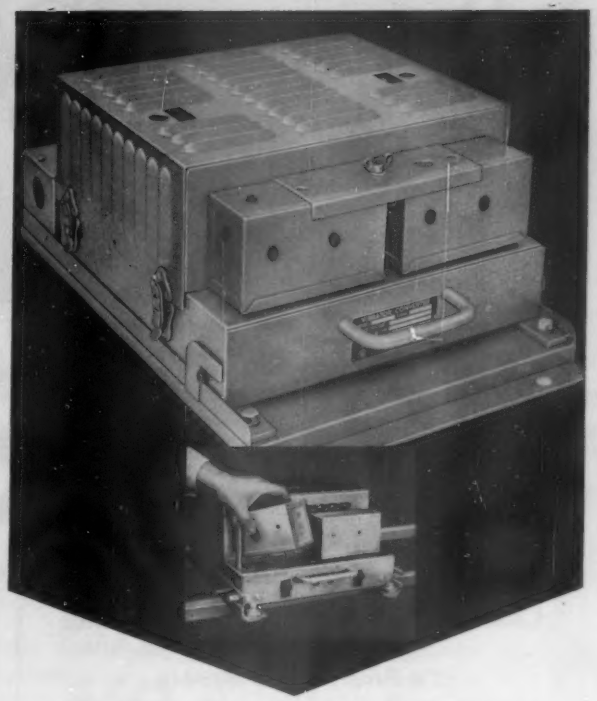
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